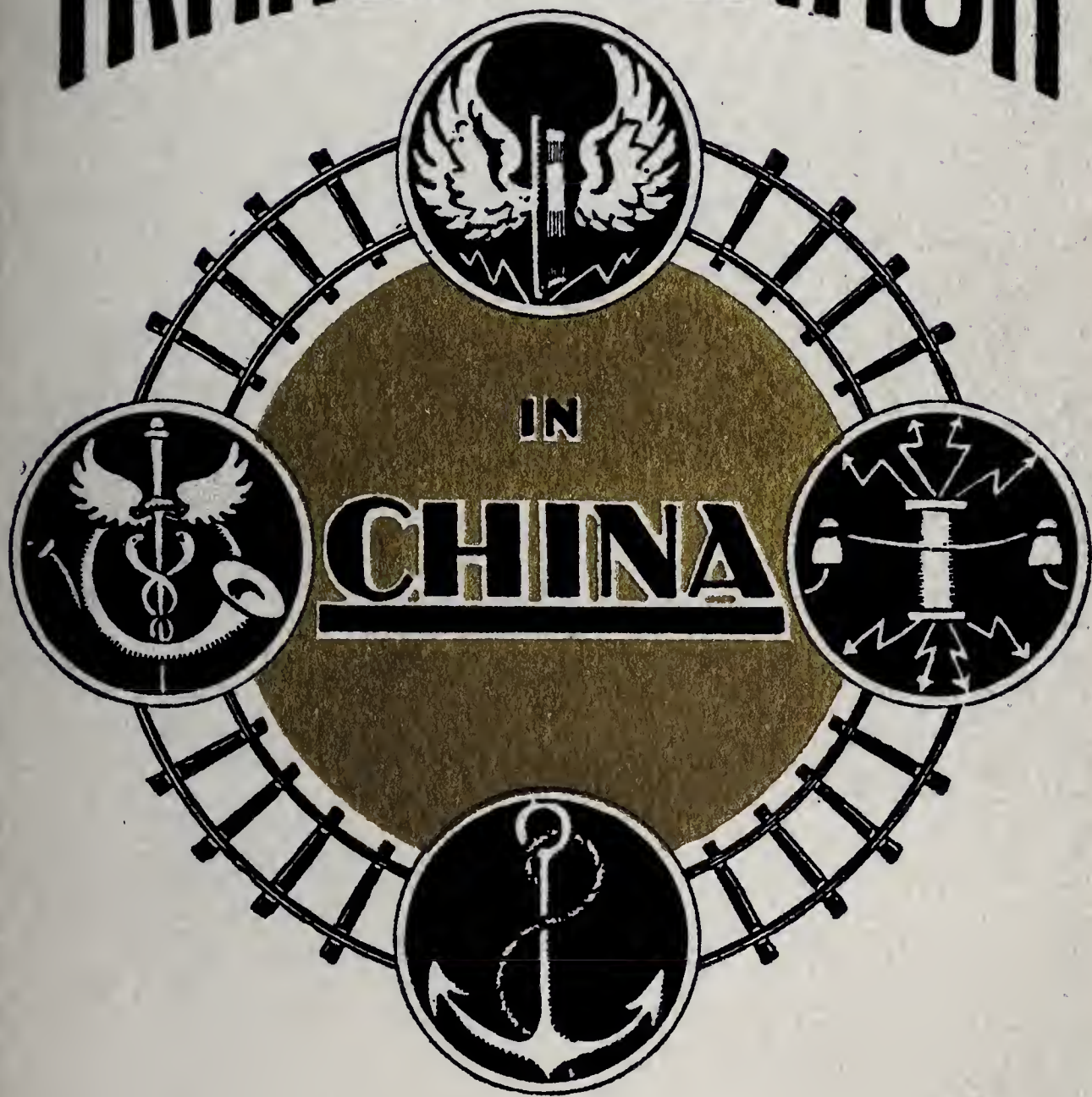


10

MODERN TRANSPORTATION



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Errors and Omissions

Counting from Title Page: On page 6, among Provincial Commissioners and Delegates, omitted C. M. YANG.—On page 16, fifth line from bottom, should read “measure to the ability and the endeavors of the Ex-Minister.



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10

Modern Transportation and Communications in the Republic of China



Report Presented by Mr. C. T. Hsia, Special Commissioner
of the Ministry of Communications of Peking, China,
to the Panama-Pacific International Exposition,
Palace of Transportation.

In presenting this Report, I take advantage of the opportunity to express my admiration for Mr. Hoa Nan-Kwei, of the Ministry of Communications at Peking, China. Thanks to the work accomplished by him, my task has been indeed made easier.

I also take pleasure at this time to tender my sincere thanks to all those who have co-operated in the endeavor to present to the public a general view of the actual Transportation and Communication Facilities of China.

August, 1915.

A handwritten signature in cursive script, appearing to read "C. S. Hoia". The signature is written in dark ink and is positioned to the right of the date.

PREFACE

The Minister of Communications at Peking was greatly pleased with the invitation tendered to China by the United States Government and by the Directors of the Panama-Pacific International Exposition to participate in the Exposition and show to the world what the present status of China is. This invitation was accepted and acted upon with real enthusiasm. In February, 1914, the Ministry of Communications organized a Special Exposition Bureau for the purpose of gathering the proper exhibits. Mr. Hoa Nan-Kwei, Chief of the General Construction Division (Railway Engineering Department), was appointed Director of this Bureau, while the writer, Assistant Chief of the General Construction Division, was appointed Special Commissioner for the Exposition.

All the exhibits brought forth are models of the actual transportation and communication facilities at present used in China. Besides these, a number of statistics and charts will help show to the public the extent of transportation facilities that China is enjoying now.

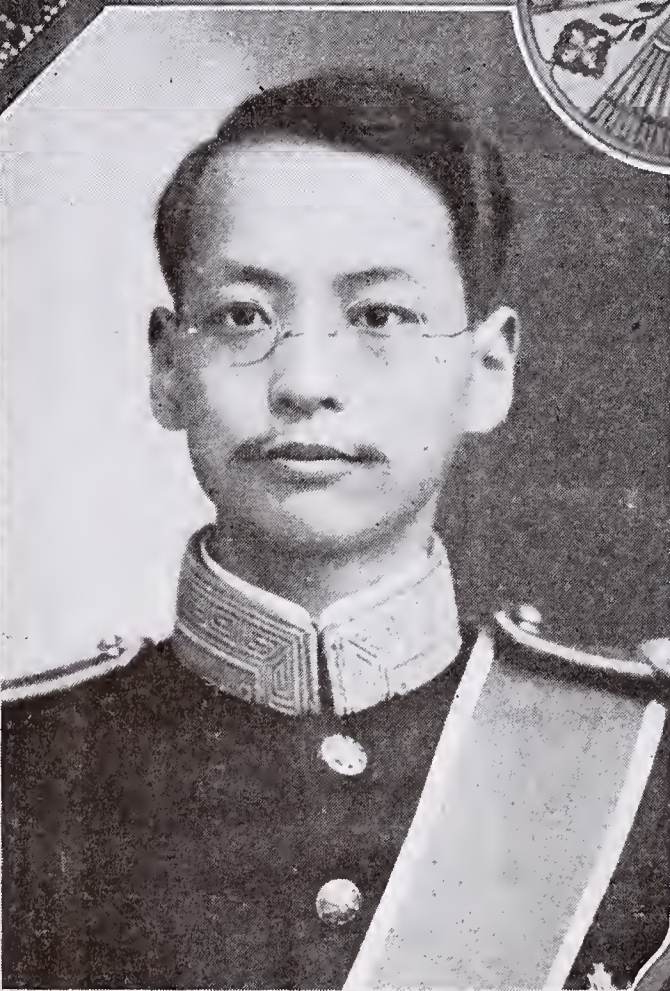
It is hoped thus to give to the outside world a glimpse into modern China, and to enable it to appreciate the tremendous work accomplished in the last decade. China is not boastful of her accomplishments, but, inspired with confidence by the results already attained, she is hopeful for her future and for the carrying out of the vast schemes of railroads and communication improvements which are so essential to modernization.

America is famous for the spirit of its pioneers, those men of undaunted will and courage who achieved the conquest of this new continent. In its modern development of machinery and transportation the United States has marveled the whole world. The present Panama-Pacific International Exposition is celebrating a crowning event in the march of progress and transportation: the opening of the Panama Canal—the key to the Orient.

China, in its recent progressive period, has been very fortunate indeed to have such an advanced neighbor and friend as the United States proved to be. The Chinese people feel they may learn much indeed from the examples of their western friends, especially as regards modern transportation. Is it not natural that two countries, similar in size as the United States and China are, united through the great waterway, the Pacific Ocean, should cultivate each other in friendship and co-operation?

By our participation in the Panama-Pacific International Exposition we feel that we are working for the introduction of better knowledge and better appreciation of one country by the other.

May both the people of the United States and China, through co-operation and contributions to each other's welfare, enjoy peace and lasting prosperity!



LIANG TUNG-YEN
MINISTER OF COMMUNICATIONS
REPUBLIC OF CHINA

中華民國交通總長梁敦彥

YEH KUNG-CHAO
VICE MINISTER OF COMMUNICATIONS

交通次長葉恭綽

CHU CHI-CHIEN
EX-MINISTER

前交通總長朱啓黔

MARK SING-KIEN
VICE MINISTER OF COMMUNICATIONS

交通次長麥信堅

MINISTRY OF COMMUNICATIONS

ORGANISATION AND ACTIVITIES

MINISTER

4 SECRETARIES

4 COUNSELLORS

2 VICE-M.S

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2. STRUCTURAL SECTION

3. MECHANICAL SECTION

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RAILWAYS ENGINEERING DEPT. MT

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3. DIVIS. MAINTENANCE

4. DIVIS. STOCK-SUPPLIES

NAVIGATION

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OVER INDEPENDENT RAILWAYS

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6. DIVISION - MATERIAL-SUPPLIES

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中華民國赴賽監督
陳琪

CHEN-CHI

COMMISSIONER-GENERAL OF THE REPUBLIC OF CHINA TO THE
PANAMA-PACIFIC INTERNATIONAL EXPOSITION

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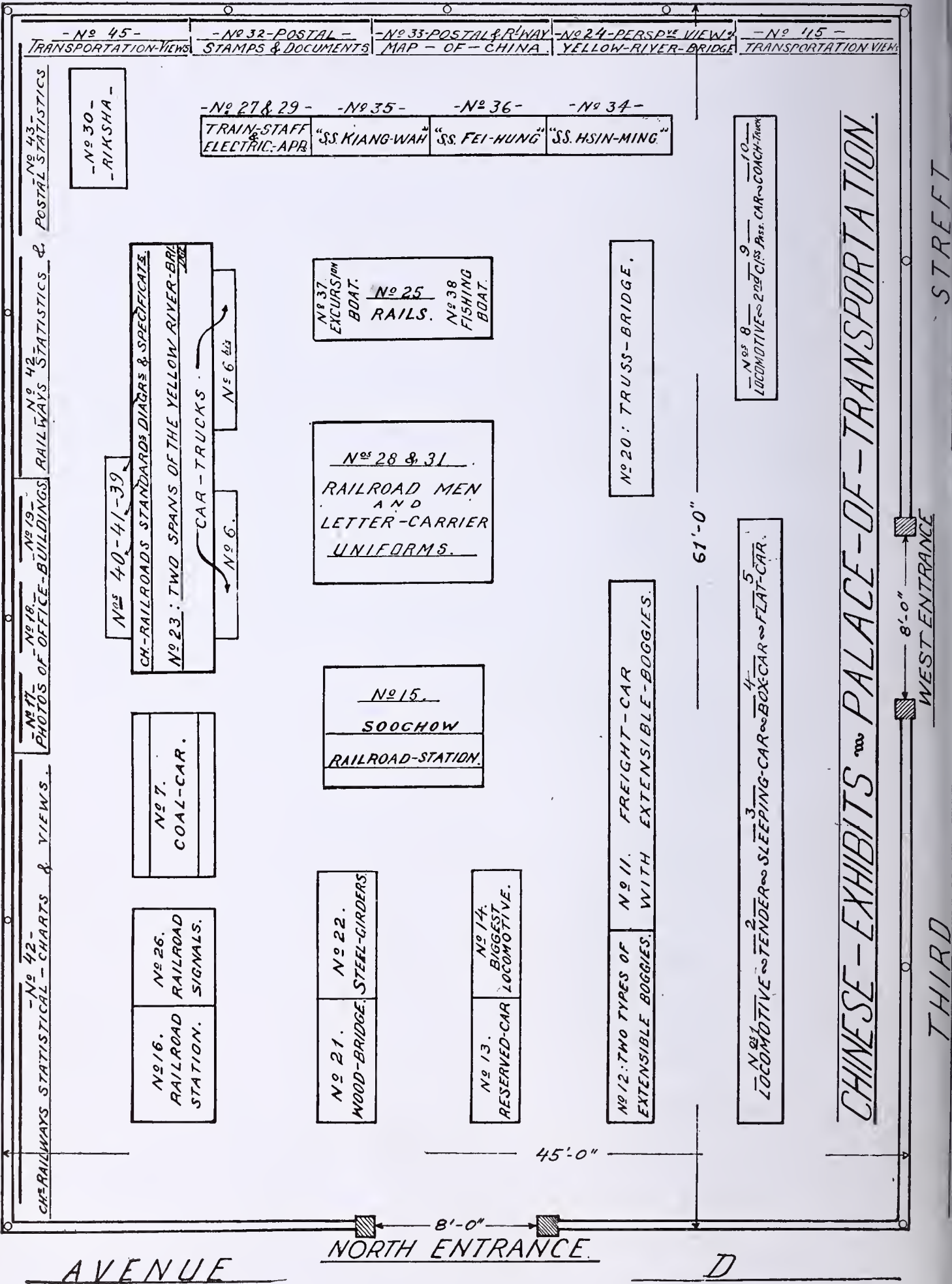
Chinese Exhibits

at the

Panama-Pacific International Exposition

1. Chinese National Pavilion.
2. Section in the Palace of Varied Industries.
3. Section in the Palace of Mines.
4. Section in the Palace of Transportation.
5. Section in the Palace of Agriculture.
6. Section in the Palace of Liberal Arts.
7. Section in the Palace of Education.
8. Section in the Palace of Food Products.
9. Section in the Palace of Fine Arts.

Plan of the Chinese Section in the Palace of Transportation.



轉運館中國部攝影



View of the Chinese Section in the Palace of Transportation.



交通部工程籌備處科長
華南圭



交通部赴國賽部特派員
夏昌熾

HOA NAN-KWEI,

Director of Exposition Bureau in the Ministry
of Communications,
Peking, Republic, of China.

C. T. HSIA

Special Commissioner of the Ministry
of Communications at the P. P. I. E.,
In charge of Transportation Exhibits

Description of Chinese Exhibits in the Palace of Transportation

賽品述畧

EXHIBIT NO. 1

MODEL OF LOCOMOTIVE (Tang-Shan Shops, Peking-Mukden Railway).

English 2-6-0 type.—Cylinder, 19 in. by 24 in.—Heating surface:—Firebox, 133 sq. ft.; tubes, 1,210 sq. ft.;—Grate area, 24 sq. ft.—Working pressure, 180 lbs. per sq. in.—Diameter of driving wheels, 5 ft.—Diameter of pony wheel, 3 ft.—Tractive force at piston speed of 250 ft. per minute, 220,000 lbs.—Total wheel base, including tender, 49 ft. $6\frac{5}{8}$ in.

EXHIBIT NO. 2

MODEL OF SLEEPING CAR (Tang-Shan Shops).

Length over frame, 63 ft.—Length between bogie centers, 44 ft.—Height, 14 ft. 2 in.—Diameter of wheels, 3 ft. 7 in.—This car is provided with separate rooms. Each room has sliding door, ventilator, steam pipe, candle and electrical lamps, spring seats, baggage shelf, looking glass and private toilet, etc., so it is extremely comfortable.

EXHIBIT NO. 3

MODEL OF TENDER (Tang-Shan Shops).

Tank capacity, 4,000 gallons.—Fuel space, $5\frac{1}{2}$ tons.

EXHIBIT NO. 4

MODEL OF BAGGAGE CAR (Tang-Shan Shops).

Length of under-frame, 55 ft.—Length over car body, 50 ft.—Center of bogies, 38 ft.—Width over car body, 10 ft.—Width over lookout windows, 10 ft. 8 in.—Height, 14 ft. 2 in.—Wheel diameter, 3 ft. 7 in.

This car is provided with both the torpedo patent ventilators and the ordinary ventilators and roof lamps. It is divided into store rooms, mail rooms and the guard room. Passengers may get stamps or postcards at any time, on the car.

EXHIBIT NO. 5

MODEL OF 30-TON OPENED CAR (Tang-Shan Shops).

Length over frame, 33 ft.—Width over frame, 10 ft.—Center of bogies, 22 ft.

EXHIBIT NO. 6

MODEL OF TRUCKS (Tang-Shan Shops).

For passenger and freight cars. Long practice proves that this sort of trucks works better than the ordinary trucks.

EXHIBIT NO. 7

MODEL OF COAL CAR (Tang-Shan Shops).

Capacity, 90 tons.—Empty weight, 17 tons, 500 kilos.

Modern Transportation in China

EXHIBIT NO. 8

MODEL OF LOCOMOTIVE FOR PASSENGER TRAINS

(Woo-Sung Shops, Shanghai-Nanking Railway).

English 4-2-2 type.—Diameter of cylinders, 18 in.—Stroke of piston, 26 in.—Diameter of driving wheel, 7 ft. 6 in.—Length over couplers, 54 ft. 3 $\frac{3}{4}$ in.—Length of engine plus tender, 54 ft. 2 $\frac{3}{8}$ in.—Weight of engine and tender, empty, 69.75 tons.—Weight of engine and tender in working order, 98.70 tons.—Tender capacity: coal, 6 tons; water, 3,500 gallons.

EXHIBIT NO. 9

MODEL OF COACHING TRUCK (Woo-Sung Shops).

Length, 22 ft. 6 in.—Tare, 9 tons 19 cwts. 3 qrs. 14 lbs.—Seating capacity, 80 passengers.

EXHIBIT NO. 10

MODEL OF SECOND-CLASS PASSENGER CAR (Woo-Sung Shops).

Length over framing, 68 ft.—Diameter of wheel, 3 ft. 6 in.—Width, 9 ft. 6 in.—Load, 21 tons.

EXHIBIT NO. 11

MODEL OF FREIGHT CAR WITH EXTENSIBLE BOGIES

(Shekiachuang Shops, Tchen-Tai Railway).

These extensible bogies are specially designed for the transfer of cars from a narrow gauge of one meter to the standard gauge of 4 ft. 8 $\frac{1}{2}$ in., and vice-versa.

EXHIBIT NO. 12

MODELS OF TWO TYPES OF EXTENSIBLE BOGIES

(Shekiachuang Shops).

One type is rigid, while the other is adjustable.

EXHIBIT NO. 13

MODEL OF RESERVED CAR (Chansintien Shops, Peking-Hankow Railway)

Total length, 17.74 meters.—Length over car body, 17 meters.—Length between bogies, 11 meters.—Diameter of wheel, 1.0 meter.

EXHIBIT NO. 14

MODEL OF THE BIGGEST LOCOMOTIVE IN USE ON THE PEKING-KALGON RAILWAY.

This model, as well as the locomotive itself, has been built and completely equipped by the American Locomotive Company. The locomotive is used on very steep gradients.

EXHIBIT NO. 15

MODEL OF SOO-CHOW STATION (Shanghai-Nanking Railway).

This station, although not of the largest type, is a very completely equipped one.

Modern Transportation in China

EXHIBIT NO. 16

MODEL OF PROPOSED RAILWAY STATION

(By Mr. Hoa Nan-Kwei).

This station is designed from an economical standpoint. The first floor to be used for the traffic and the second floor to contain the offices of the railway.

EXHIBIT NO. 17

PHOTO OF HEAD OFFICE, TIENTSIN (Peking-Mukden Railway).

EXHIBIT NO. 18

PHOTO OF HEAD OFFICE, SHANGHAI (Shanghai-Nanking Railway).

EXHIBIT NO. 19

PHOTOS OF TANG-SHAN SHOPS (Peking-Mukden Railway).

EXHIBIT NO. 20

MODEL OF TRUSS BRIDGE (Canton-Kowloon Railway).

EXHIBIT NO. 21

MODEL OF WOODEN BRIDGE (Chuchow-Pingsiang Railway).

EXHIBIT NO. 22

MODEL OF PLATE GIRDERS

(Shanhaikwan Bridge Works, Peking-Mukden Railway).

EXHIBIT NO. 23

MODEL OF YELLOW RIVER BRIDGE (Peking-Hankow Railway).

The model shows two spans only. This is the longest bridge in China, having 102 spans, 50 spans of 34.76 meters each, and 52 spans of 24.46 meters each.—Total length, 3,010 meters.—Designed by a French engineer. The superstructures, as well as the foundations, are all made of steel.

EXHIBIT NO. 24

VIEW OF YELLOW RIVER BRIDGE (Tientsin-Pukow Railway).

Length, 1,255 meters; breadth, 9 meters; 12 main spans. The work was started at the end of 1909 and completed at the end of 1912.—Cost, 8,000,000 Chinese dollars.

EXHIBIT NO. 25

STANDARD RAIL SECTIONS AND FASTENINGS

(Hanyang Iron Works, Hanyang).

- | | | |
|-----|--------------------------------|---|
| (1) | Chinese Standard Section..... | 85 lbs. per yard |
| (2) | American Standard Section..... | 85 lbs. per yard |
| (3) | Lung-Hai Section | 85 lbs. per yard |
| (4) | Peking-Hankow Section | 37.7 kgs. per meter |
| (5) | Small Rails | 15 kgs., 12.5 kgs. and 8 kgs. per meter |

EXHIBIT NO. 26

MODELS OF RAILROAD SIGNALS

(Shanhaikwan Bridge Works, Peking-Mukden Railway).

Modern Transportation in China

EXHIBIT NO. 27

MODEL OF ELECTRICAL-TRAIN-OPERATING DEVICE.
(Pekin-Hankow Railway.)

EXHIBIT NO. 28

CHINESE RAILROAD MEN UNIFORMS.

Full Dress	Black
Winter Uniform.....	Dark Green
Summer Uniform.....	Dark Blue or White

EXHIBIT NO. 29

PORCELAIN BATTERIES and INSULATORS (Kiangso Porcelain Company).
Used for the **Chinese Government Telegraphic Service.**

EXHIBIT NO. 30

A RIKSHA (Tung-Chang Bicycle Company, Shanghai).

EXHIBIT NO. 31

LETTER-CARRIER UNIFORM.

EXHIBIT NO. 32

CHINESE POSTAGE STAMPS AND POST-OFFICE DOCUMENTS.

EXHIBIT NO. 33

POST AND RAILWAY MAP OF CHINA.

EXHIBIT NO. 34

MODEL OF COAST STEAMER "HSING-MING"

(Built by the Kiang-Nan Engineering Docks, Shanghai).

hibited by the **China Merchants' Steam Navigation Company.**

Length	270 ft. 0 in.
Breadth	41 ft. 0 in.
Depth	21 ft. 6 in.
Draft	15 ft. 6 in.
Displacement in tons.....	3,500
Indicated horse-power	2,000
Speed in knots.....	14
Gross tonnage	2,100

EXHIBIT NO. 35

MODEL OF RIVER STEAMER "KIANG WAH."

Length over all.....	341 ft. 6 in.
Breadth over all.....	58 ft. 0 in.
Depth	24 ft. 3 in.
Draft	12 ft. 0 in.
Displacement in tons.....	3,670
Indicated horse-power	3,000
Speed in knots.....	16½
Gross tonnage	4,131

Modern Transportation in China

EXHIBIT NO. 36

MODEL OF FERRYBOAT "FEI-HUNG."

Connecting the Tientsin-Pukow Line and the Shanghai-Nanking Line of the Government Railways across the Yangtse River.

EXHIBIT NO. 37

MODEL OF NATIVE EXCURSION BOAT (Canton Type).

EXHIBIT NO. 38

MODEL OF FISHING BOAT (Canton Type).

EXHIBIT NO. 39

STANDARD DIAGRAMS AND SPECIFICATIONS OF RAILROAD CONSTRUCTION.

EXHIBIT NO. 40

STANDARD CONSTRUCTION OF CARS AND LOCOMOTIVES (Peking-Hankow Railway).

EXHIBIT NO. 41

RAILROAD REPORTS AND REGULATIONS

EXHIBIT NO. 42

STATISTICAL CHARTS OF THE CHINESE GOVERNMENT RAILROADS

EXHIBIT NO. 43

STATISTICAL CHART OF THE CHINESE POSTAL SERVICE.

EXHIBIT NO. 44

STATISTICAL CHART OF THE CHINESE GOVERNMENT TELEGRAPHIC SERVICE.

EXHIBIT NO. 45

VIEWS FROM CHINA.



The Railroads in China

中國路政

With regard to the progress China has recently made in her various means of communication, the advancement in railroad construction is the most prominent feature. The reason for this, is to be found in the immense size of her territory, her numerous products and the urgent need of bettering and speeding-up her old-established transportation ways.

The first proposal for establishing railroads in China was introduced in the year 1863. The construction of the Shanghai-Woo-sung Line, 20 kilometers in length, was achieved in 1876; and that of the Kiaping Mine Railway, 15 kilometers in length, in 1881. But the Manchu Government, as well as the people, did not apparently realize the importance and the necessity of the railroads until 1886, when the first part (from Tang-Shan to Tientsin) of the Peking-Mukden Line, was properly constructed and operated. The construction of the entire net of railroads operated today in China may be roughly divided into four periods:

	Years.
First Period	1886-1894
Second Period	1895-1905
Third Period	1906-1911
Fourth Period	1912-1915



Modern Transportation in China

During the **first period**, ending with the year when the China-Japan war took place (1894), China had only 444 kilometers of railroad line in operation.

The **second period**, beginning at the end of the China-Japan war in 1895, lasted until the year 1905, which marked the termination of the Russo-Japanese war. Towards the end of this period China had altogether 2,842 kilometers of railroads, representing an addition of 2,398 kilometers to the amount belonging to the first period. Thus started the new era of rapid progress in railroad construction in China; for during this period of 11 years, an average of about 218 kilometers was added every year to the existing railroad lines.

The **third period**, starting with the conclusion of the Russo-Japanese war in 1906, lasted until the downfall of the Manchu Dynasty in 1911. At the end of this third period, China possessed a total length of 4,661 kilometers, showing an increase of 1,819 kilometers within six years. This amounts to an average of 303 kilometers of new railroads constructed each year.

The **fourth period** begins in 1912, at the birth of the Chinese Republic, and is continuing up to the present day. Although this covers only not quite three years, yet, the total amount of railroad lines in China has been raised to 5,475 kilometers (end of 1913). There are now under construction or preparation about 8,200 kilometers of new lines. This number is divided approximately thus:

- (1,500) Fifteen hundred kms. for the Lung-Hai Line.
- (1,500) Fifteen hundred kms. for the Tatung-Chengtzu Line.
- (1,000) One thousand kms. for the Szechuan-Hankow Line.
- (1,000) One thousand kms. for the Shasi-Singyi Line.
- (1,000) One thousand kms. for the Cheng-Yu Line.
- (900) Nine hundred kms. for the Canton-Hankow Line.
- (850) Eight hundred and fifty kms. for the Ning-Siang Line.
- (450) Four hundred and fifty kms. for the Pukow-Singyang Line.

Therefore, within the next few years The Chinese Government will own and control a total of about 13,700 kms. of railroad lines.

China has suffered in this last period from internal upheavals and disorders which interrupted most of the progressive reforms. However, the development of transportation was not only uninterrupted but was pushed forward and very much is being actually accomplished in spite of all interference and difficulties produced by the political reformation since 1912. This was due in a large increase of the ability of the Ministry, in maintaining as well as of Communications, Chu-Chi-Chien, and the present Vice-Minister, Yeh-Kung-Chao, who was then Director General of the Railroads in the Ministry of Communications; they have done the utmost in up-keeping the continued progress of railroad construction in China.

Modern Transportation in China

In 1913 the Ministry of Communications created a committee for the unification of railroad accounting. Dr. C. C. Wang, who is now Director of the Railway-Accounting Department, was appointed Chairman of this committee, and Mr. Adams, an expert American railroad man, was appointed Advisor to the committee. In 1914 a reorganization of the Ministry of Communications was devised by the Minister, Liang Tung-Yen. The definite plan was carried out successfully the very same year with the net results of increase of the ability of the Ministry, in maintaining as well as financing all the railroads and the other communication systems. These facts show the great desire and the efforts undertaken by the Government for the rapid development of modern transportation facilities in China. It is felt that upon these depend the successful accomplishment of many other important reforms.

VARIOUS INFORMATIONs REGARDING THE CHINESE GOVERNMENT RAILWAYS.

Rails of Metric Standard—Length, 9 m.-9.75 m. Weight, 37 kgs./m.-42 kgs./m.

Rails of English Measures—Length, 30 ft. Weight, 60 lbs./yd.-85 lbs./yd.

The specifications call for a limit of carbon of from 0.35 to 0.45 per cent in the steel rail. The tensile strength of the material should be from 65 to 80 kgs. per square mm., or from 40 to 50 lbs. per square inch. Most of the rails used are manufactured by the Hang-Yang Iron Works.

Railroad Ties or Sleepers are having a cross section of 14 cms. by 22 cms., or 6 in. by 9 in. Specifications call for well-seasoned and carefully creosoted ties.

Cars and Locomotives are built according to the "Standard Diagrams and Specifications," approved by the Ministry of Communications.

Maintenance.—Each line of the Chinese Government Railways has one or more shops of its own for the manufacture and repairing of its cars and locomotives. These shops are, generally speaking, of small capacity. Among them the Tang-Shan Shops of the Peking-Mukden Line may be considered at present the largest. It has not only the ability of supplying cars and locomotives for its own line, but also to fill in car orders for other railways.

Bridges.—The largest and most famous railroad bridge of China is the Yellow River Bridge of the Peking-Hankow Line.

This bridge is all made of steel, having altogether 102 spans and a total length of 3,010 meters. All its piers and abutments are made of steel columns, screwed deeply down into the bottom of the river. Our model, in the Palace of Transportation, represents a steel-truss span and a plate girder span of this bridge.

The second largest railroad bridge is the Yellow River Bridge on the Tientsin-Pukow Line (on the lower side of the river). The foundations of this bridge are of stone and concrete masonry, including many concrete piles, while the body of the bridge consists of steel structures. The bridge is 9 meters in width, containing two railroad tracks and two sidewalks. Its total length is 1,255 meters. It was started in 1909 and completed at the end of 1912.

Very soon another large bridge is to be built over the Yangtze River as a connection between the Peking-Hankow Line and the Hankow-Canton Line.

Gauges.—All of the Chinese Railroads, except one, are following the normal gauge of 4 ft. 8½ in. or 1.435 m. The Tcheng-Tai Line, 243 kilometers in length, is built according to the narrow gauge of one meter. However, through the means of extensible bogies, the cars running on this railway may be transferred into the Peking-Hankow Line, of standard gauge. The use of the extensible bogies has produced—so far—highly satisfactory results.

Signals.—A uniform system of safety block-signaling has been successfully put into use on all the railroads of China. The main lines and stations are fitted with automatic ladders, while minor lines use ladders handled by man-power.

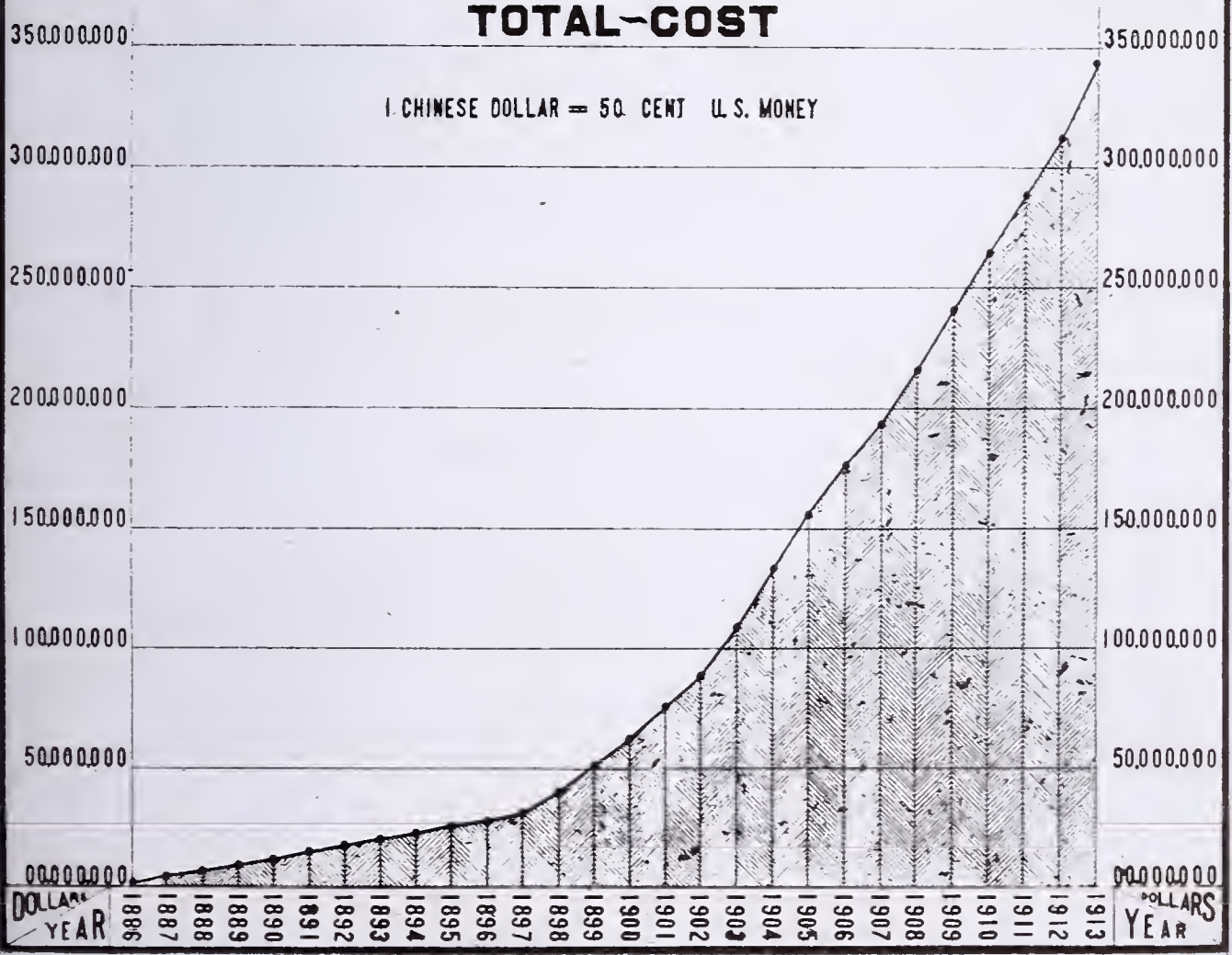
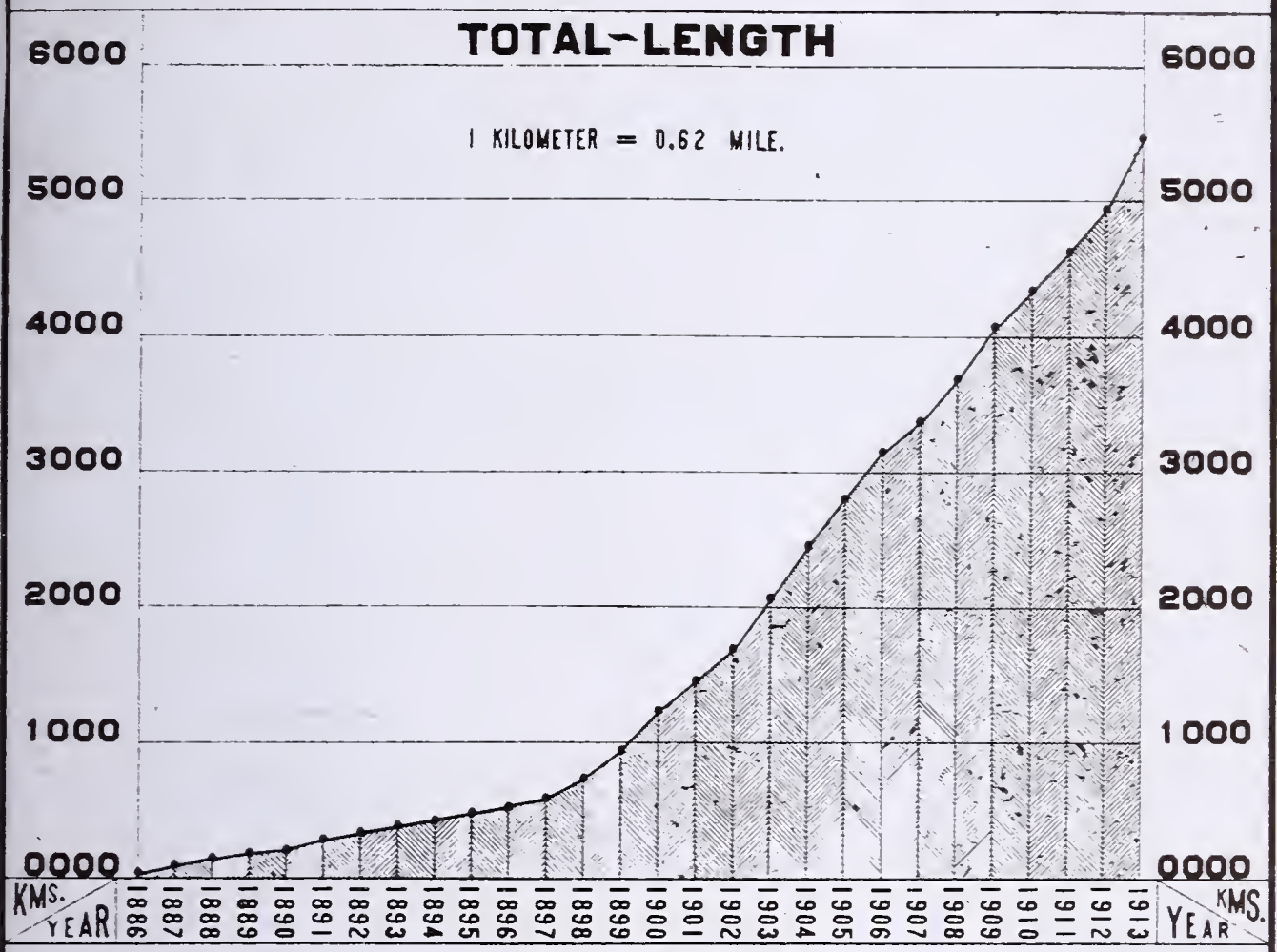
The statistical charts herein shown will give a graphical demonstration of the actual status of the Chinese Government Railways.



THE YEARLY INCREASING OF LENGTH AND COST OF CONSTRUCTION OF GOVERNMENT RAILWAYS

GOVERNMENT RAILWAYS IN OPERATION.....5 4 7 5 KM.

OTHER RAILWAYS IN OPERATION.....4 2 5 0 KM.



GOVERNMENT RAILWAYS

LENGTH OF LINES AND AVERAGE COSTS PER KILOMETER

GOVERNMENT RAILWAYS IN OPERATION..... 5.475 KM

GOVERNMENT RAILWAYS UNDER CONSTRUCTION..... 8.200 KM.

TOTAL 13.675 KM.

RAILWAYS	LENGTH IN KM.		COST PER KM.	HEAD OFFICE	NO. OF STATION
	MAIN LINE	BRANCHES			
PEKING-HANKOW LINE	1.214	101	\$ 53.065	PEKING	102
PEKING-MUKDEN LINE	839	151	\$ 50.102	TIENTSIN	72
TIENTSIN-PUKOW LINE	1.015	64	\$ 81.904	TIENTSIN	89
SHANGHAI-HANCHOW NINCPO LINE	387		\$ 57.600	SHANGHAI	
SHANGHAI-NANKING LINE	311	26	\$ 78.136	SHANGHAI	43
TCHENG-TAI LINE	243		\$ 85.995	SHEKIACHWAN	35
PEKING-KALCON LINE	201	26	\$ 45.826	PEKING	18
KAIFENG-HONAN LINE	185		\$ 59.300	CHENGCHOU	12
KIRIN-CHANGCHUN LINE	128		\$ 46.317	CHANGCHUN	13
TAOKOU-TSINGHUA LINE	150		\$ 46.323	SHINSHIANG	20
CANTON-KOWLOON LINE	145		\$ 84.000	KWANGCHOU	42
KALCON-SUIYUAN LINE	152			PEKING	15
CHUCHOU-PINCHSIAN LINE	90	27	\$ 50.066	LILING	14
CANTON-SAMSHUI LINE	52			KWANGCHOU	12
TATUNG-CHENG TU LINE	1.500			PEKING	
LUNG-HAI LINE	1.500			PEKING	
SZECHUAN-HANKOW LINE	1.000			HANKOW	
CANTON-HANKOW LINE	900			HANKOW	
SHASI-SINGYI LINE	1.000			PEKING	
CHUNG-YU LINE	1.000			PEKING	
NING-SIANG LINE	850			NANKING	
PUKOW-SINGYANG LINE	450			PEKING	

..... RAILWAYS NOT YET COMPLETED

GOVERNMENT - RAILWAYS

YEAR : 1913

TOTAL RECEIPTS AND EXPENDITURES

	0	1	2	3	4	Millions \$ 5
PEKING HANKOW LINE						
						17,440,000 \$ Receipts.
						5,119,000 \$ Expenses.
PEKING MUKDEN LINE						Receipts: 14,400,000 \$
						5,127,000 \$ Expenses.
TIENTSIN PUKOW LINE						5,840,000 \$ Receipts.
						8,265,000 \$ Exp.
SHANGHAI NANKING LINE						3,027,000 \$ Rec ^{ts} .
						1,811,000 \$ Expenses.
PEKING KALCON LINE						2,632,000 \$ Receipts.
						1,110,000 \$ Expenses.
TCHENG TAI LINE						2,133,000 \$ Receipts.
						1,726,000 \$ Expenses.
KAIFENG HONAN LINE						984,000 \$ Receipts.
						464,000 \$ Expenses.
KIRIN CHANGCHUN LINE						674,000 \$ Receipts.
						652,000 \$ Expenses.
KALCON SUIYUEN LINE						586,000 \$ Receipts.
						275,000 \$ Expenses.
TAOKOU TSINGHUA LINE						548,000 \$ Receipts.
						626,000 \$ Expenses.
SHANGHAI FENGCHING LINE						531,000 \$ Receipts.
						354,000 \$ Expenses.
CHUCHOU PINCHSIA LINE						520,000 \$ Receipts.
						340,000 \$ Expenses.
CANTON KOWLOON LINE						393,000 \$ Receipts.
						371,000 \$ Expenses.
Total Receipts						49,708,000 \$
Total Expenses						26,986,000 \$

GOVERNMENT RAILWAYS

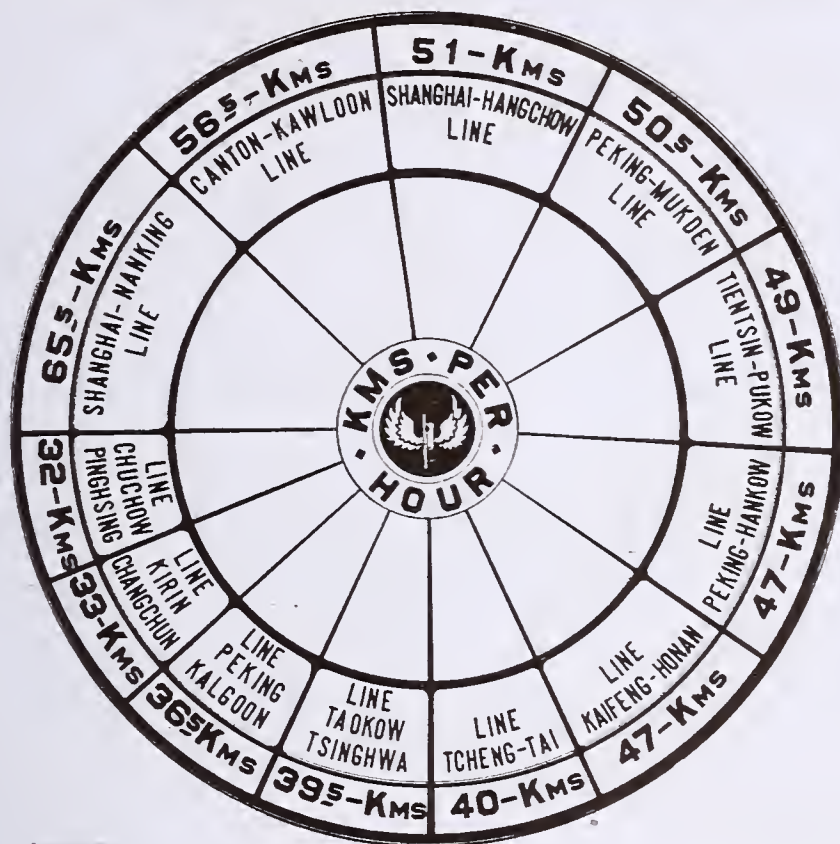
SHOPS AND WORKING

STANDARDS

RAILWAY	SHOP LOCATION	NUMBER OF EMPLOYEES	YEARLY WORKING DAYS	DAILY WORKING HOURS	PAY PER DAY	
					MAXIMUM	MINIMUM
PEKIN-HANKOW	CHANG-SIN-TIEN	1030	300	9	4.00	0.70
	LIU-KIA-MIO	732	300	9	4.00	0.70
	TCHENG-CHOW	189	300	9	4.00	0.70
PEKIN-MUKDEN	TANG-SHAN	3850	300	9	3.60	0.40
	KOUPANCTZE	449	303	10	3.20	0.50
	SHAN-HAI KWAN BRIDGE WORKS	605	312	9	2.00	0.30
TIENTSIN-PUKOW	TIENTSIN	241	310	9	3.60	0.50
	TSINAN	681	310	10	3.00	0.40
	PUKOW	50	310	9	3.00	0.60
SHANCHAI-NANKING	WOO-SUNG	284	307	10	2.80	0.30
	SHANCHAI	841	307	10	3.20	0.30
TCHENG-TAI	YANG-CHUAN	143	298	11	3.00	0.60
	SHEKIACHWAN	792	298	11	3.00	0.60
	TAI-YUAN	148	298	11	3.00	0.60
PEKING-KALCON	NANKOW	550	312	9	3.00	0.40
KAIFENG-HONAN	PIENLO	280	312	10	2.00	0.50
TAOKOW-TSINGHWA	TAO-CHING	330	308	10	3.40	0.44
CANTON-KAWLOON	KWANG-CHIU	194	312	9	2.00	1.20
KALCON-SUIYUAN	CHANG-SUI	178	312	9	3.00	0.50
KIRIN-CHANGCHUN	CHI-CHANG	226	312	10	3.60	0.60
CHUCHOW-PINGHSING	CHU-PING	248	312	10	4.00	0.40

GOVERNMENT RAILWAYS

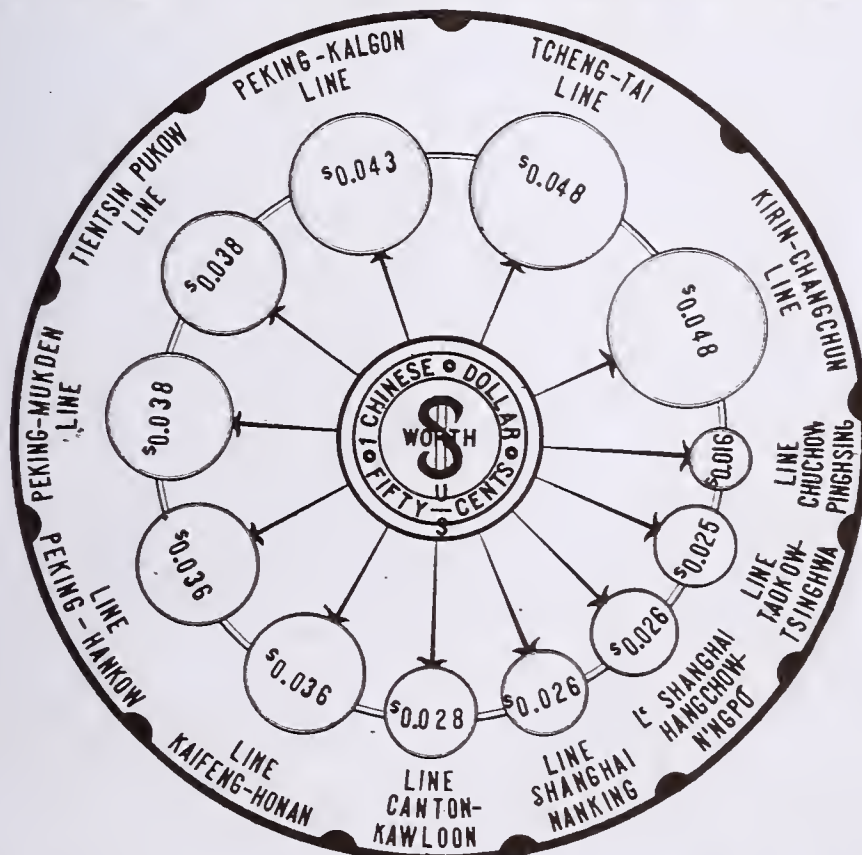
AVERAGE — SPEEDS



1 KILOMETER EQUALS 0.62 MILE

FIRST CLASS PASSENGER TRAINS

FARE PER KILOMETER



GOVERNMENT - RAILWAYS

ROLLING STOCK

INVENTORY

END OF YEAR 1913

RAILWAYS	Locomotives	Tenders	Passenger Cars	Freight Cars	Total of Units
Peking-Hankow	126	84	242	2602	3054
Tientsin-Pukow	82	70	153	1167	1472
Peking-Mukden	137	117	306	2941	3501
Shanghai-Nanking	31	31	82	288	432
Shanghai-Hangchow (Kiangsu-Section)	8	7	43	75	133
Shanghai-Hangchow (Cherkiang Section)	19	13	50	283	365
Tcheng-Tai	51	46	63	496	656
Peking-Kalgou	37	26	60	392	515
Kaifeng-Honan	15	10	38	328	391
Kalgou-Suiyuan	8	4	24	100	136
Taokow-Tsinghuai	10	8	33	166	217
Canton-Katuloon	9	7	31	47	94
Kirin-Changchan	13	11	20	171	215
Chuchow-Ningsing	12	10	16	183	221
TOTALS	558	444	1161	9239	11402

The Postal Service in China

中國郵政

In early days China possessed two postal systems—one, the Imperial Government Courier Service, on foot or horseback, for the transmission of official dispatches; the other, the native postal agencies, long-accredited by the people. In 1865, after the foreign representatives of the Western nations took up their residences at Peking, it was found more convenient to arrange that some of the Custom Houses take the responsibility for the transmission of the mail.

Postal Departments were later established at various Custom Houses in the year 1878, when the first Custom Postal Stamps were introduced. This was the foremost step towards the founding of a modern postal system in China. The public soon afterwards recognized its usefulness and practicability. However, the General Postoffice Service was not established until 1896, when the then Emperor of the Ching Dynasty, Kwang Hsu, issued a decree declaring the intention of the Central Government of China to undertake the national responsibility of the Postal System. Since then, and with the entrance of China into the International Postal Union, progress has been realized in every branch of the service; especially so within the last ten years.



Modern Transportation in China

Geographically, China is divided into four large Postal Districts.

1. **North China**, which embraces the Provinces of Chihli (including Mongolia), Shansi, Honan, Shensi, Kansu, Sinkiang (Chinese Turkestan), Manchuria (Shengking, Kirin, Heilungkiang) and Shangtung.

2. **Central China**, which embraces the Szechwan, Hupeli, Hunan, Kiangsi and Kweichow Provinces.

3. **Lower Yangtze**, which embraces the Provinces of Kiangsu, Anhwi and Chekiang.

4. **South China**, embracing the Fukien, Kuantung (including Hainan), Kuangsi, and the Yunnan Provinces with the Tibet.

The Postal Establishments are classified as follows:

- (a) Head Office and Sub-head Offices.
- (b) Branch and Inland Offices.
- (c) Second-Class Offices, and
- (d) Postal Agencies, or Box Offices.

The designs used for the **Postage Stamps** have been changed from time to time. In the Ching Dynasty the "dragon," the "fish" and the "bird" were used. After the reformation (of the Government) other designs such as scenes of "sailing," "farming" and "ancient structures" have been used. In December, 1912, two sets of special stamps were issued in commemoration of the Revolution and of the founding of the Republic. The issue was but a limited one, the lithographing plates being destroyed immediately after the printing of a fixed number of stamps.

The Chinese Post Cards are of the single type and of the double type, or "reply post cards."

The Money Order Forms are printed in Chinese as well as in English. The title "Money Order" is printed at the top of either form.

There are also special forms for **Express Letters** and for **Registered Letters**, and other purposes.

The amount of mail matter handled during the year 1913 is an index of the expansion and the efficiency of the service. The total comes close to 630 million pieces, showing an increase of 186 millions above the previous year's total. One of the most notable results achieved through the extension of the Postal System is the large increase of the newspaper business. Since 1912 the rates for newspapers and printed matter have been reduced by one-half. The

Modern Transportation in China

number of parcels handled in 1913 exceeds the number handled in 1912 by more than two and one-half millions, the total amount handled being 262 million parcels.

The number of express letters delivered, exceeded by nearly 18 millions the number delivered the preceding year, the total number being 4,400,000.

The letters collected from boxes, post pillars, etc., amounted to 34 millions, an excess of 11 millions over the previous year.

The number of **Postal Employees** in the year 1913 was advanced to 21,552, while the **Postal Establishments** numbered 7,808, showing an increase of about 1,000 offices in one year.

The transmission of mail matter has been in many cases accelerated lately by the conversion of tri-weekly and day service only, into fast day-and-night through service. The system is steadily progressing through the improvement of the existing lines and the weaving of new lines into the postal net.

With the completion of the Yellow River Bridge (Tientsin-Pukow Railway) in 1912 direct rail communication was established between Shanghai and the European capital cities. The Shanghai mail reaches Peking within 37 hours. The direct mail between London and Peking via Siberia, inaugurated in 1912, has worked to the satisfaction of all concerned, the time for same being about two weeks one way, or four weeks, return trip.

On most railway lines **Mail Cars** are placed at the disposal of the Postoffice authorities, for safeguarding and facilitating the transmission of mail matter.

The **Postal Couriers**, as well as the railway mail clerks, have been provided with uniforms as exhibited in the Palace of Transportation (P.-P. I. E.), not only for comfort, but also for the sake of personal appearance.

In Peking, Shanghai, Tientsin, and all the other leading cities the letter carriers have been provided with bicycles. The delivery system has been so well organized that the "test letters" sent out daily to various members of the community are usually answered in very complimentary terms for the service.

The Chart on next page shows the number of postal articles handled during the years 1905 to 1913.

THE POSTAL SERVICE IN CHINA

DURING THE YEARS 1905 - 1913

MAIL MATTER

YEAR	RECEIVED	DESPATCHED	IN TRANSIT	TOTAL
1905	39,099,583	23,058,735	16,904,110	78,961,428
1909	56,103,460	31,994,143	24,677,211	112,774,814
1907	81,269,069	51,586,781	35,462,283	198,317,132
1908	129,382,178	74,158,979	49,258,844	252,800,000
1909	148,168,900	90,088,200	68,563,600	306,820,600
1910	175,293,320	99,655,820	81,780,860	355,720,000
1911	204,597,531	116,748,914	99,916,560	421,263,005
1912	217,975,300	124,113,000	101,944,230	443,732,530
1913	310,117,727	183,154,465	136,174,915	629,447,107

PARCELS

YEAR	TOTAL NUMBER	TOTAL WEIGHT
1905	1,032,163	KILOS 3,262,606
1909	1,383,534	KILOS 4,320,106
1907	1,920,993	KILOS 5,509,168
1908	2,455,742	KILOS 7,155,513
1909	3,280,747	KILOS 9,176,410
1910	3,796,921	KILOS 11,533,099
1911	4,237,422	KILOS 13,702,964
1912	3,698,052	KILOS 13,117,039
1913	6,177,091	KILOS 22,028,427

EXPRESS LETTERS

YEAR	RECEIVED	DESPATCHED	TOTAL
1906	50,128	45,792	95,920
1907	108,797	112,905	221,702
1908	157,808	159,329	317,137
1909	451,711	457,194	908,605
1910	945,676	948,202	1,893,878
1911	1,344,982	1,347,103	2,992,085
1912	1,309,550	1,298,883	2,595,433
1913	2,190,911	2,214,795	4,375,706

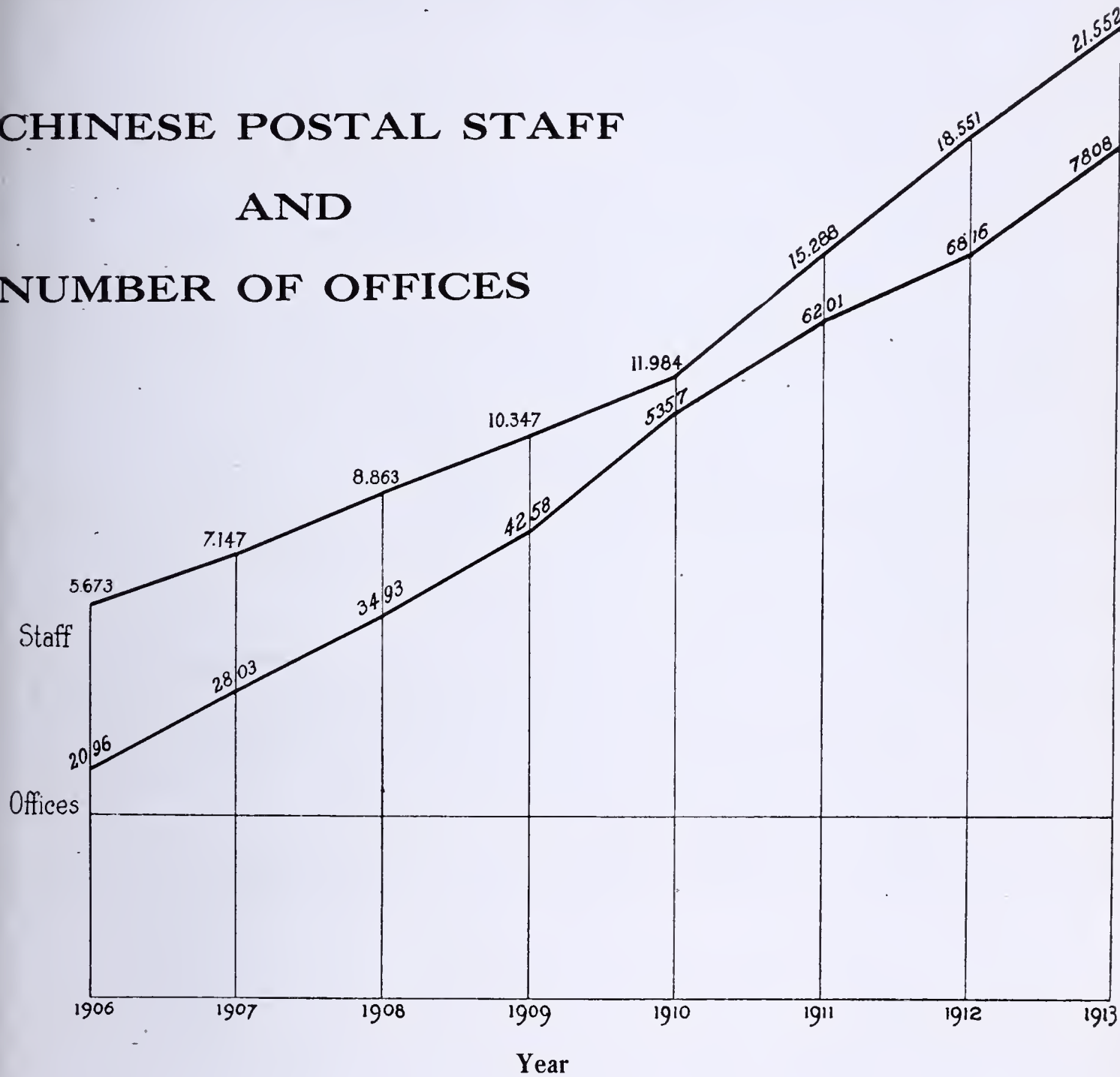
ARTICLES COLLECTED FROM LETTER BOXES &C.

YEAR	LETTERS	OTHER ARTICLES	TOTAL
1906	6,895,925	336,387	7,232,312
1907	7,854,578	258,804	8,113,382
1908	8,229,990	2,869,009	11,099,038
1909	15,407,500	1,637,300	16,044,800
1910	18,925,106	1,143,500	20,068,600
1911	21,897,900	1,939,220	23,807,120
1912	19,404,300	2,458,900	21,863,100
1913	29,044,100	4,511,200	33,555,300

Modern Transportation in China

The Chart on this page shows the increase in the number of postal employees and postal establishments during the years 1906 to 1913.

CHINESE POSTAL STAFF AND NUMBER OF OFFICES



The Telegraph Service in China

中國電務

The Telegraph System was introduced into China in the year 1879, when the line between Taku and Tientsin was opened. Up to the year 1881 China had developed 235 kilometers of telegraph lines, owned and operated by the Government.

In 1882, when the line from Shanghai to Tientsin was officially inaugurated, its management was entrusted to an incorporated company under the supervision of the Government. The line was after that extended from Shanghai westward up the Yangtze Valley, southward to Canton and from Tientsin it was continued northward to Peking. Since then almost all the other cities have been gradually inter-connected by telegraph lines.

In 1902 the Government of China, after proper investigations, undertook directly the management of all telegraphic lines. By 1907 the entire system of Chinese service, was under the direct control and ownership of the Chinese Government. The following tableau will show the different stages of evolution of the Chinese telegraphic service:

Years

First Period....1879 to 1882	{ Government Ownership. { Government Management.
Second Period..1882 to 1902	{ Private Ownership. { Private Management under { Government Supervision.
Third Period....1902 to 1907	{ Government and Private { Ownership. { Government Management.
Fourth Period...1907 to 1915	{ Government Ownership. { Government Management.

The Chart on the following page shows the increases in length of telegraph wires, in telegraph stations, in number of employees, from the years 1881 to and including 1914.

At the end of the year 1914 the number of stations was 669 and the number of employees had attained 9,021. Telegraphy schools had been established in the following cities:

Shanghai	Tientsin	Chengtu
Wuchang	Yunnan	Peking
Nanchang	Mukden	Lanchow
Fihwa	Changsha	Canton

and various other places.

The charges for Telegrams in Chinese language are as follows:

- To all places in the same province SIX CENTS (Chinese currency) PER WORD.
- To all other places in China, TWELVE CENTS PER WORD.
- All Press messages THREE CENTS PER WORD all over China.

Modern Transportation in China

Charges for Telegrams in foreign languages are as follows:

(d) To all places in the same province **NINE CENTS**
(Chinese currency) **PER WORD**.

(e) To all other places in China **EIGHTEEN CENTS**
PER WORD.

(f) Press messages **SIX CENTS PER WORD** all over
China.

Cablegrams are transmitted to all parts of the world at the
following rates: **Chinese Currency.**

Shanghai to	Manila.....	\$0.70
"	" India	1.15
"	" Australia	1.20
"	" Russia	1.65
"	" Honolulu	1.90
"	" Europe	2.10
"	" San Francisco	2.10
"	" other parts of the U. S.....	2.10 to \$2.35
"	" Canada	2.25
"	" Mexico	2.55
"	" Africa	3.00
"	" Panama	3.35
"	" South America	4.55

Press messages are usually accepted at half rates.

The cable companies now operating in China are:

The Great Northern Telegraphic Company (Denmark).

**The Eastern Extension, Australia and China Telegraph Com-
pany (British).**

The Commercial Pacific Cable Company (American).

**The Deutsch - Niederlandische Telegraphen Gessellschaft
(German-Dutch).**

Wireless Telegraph Stations have also been established in:

Kalgon	Canton	Hankow	Peking	Tsungming	Foochow
Samshui	Tibet	Woosung	Sian	Paoting	Shanghai

Their number has been probably increased at this date. The
rate for Coast Stations is now **TEN CENTS PER WORD** (Chi-
nese currency), minimum charge being one dollar per message.

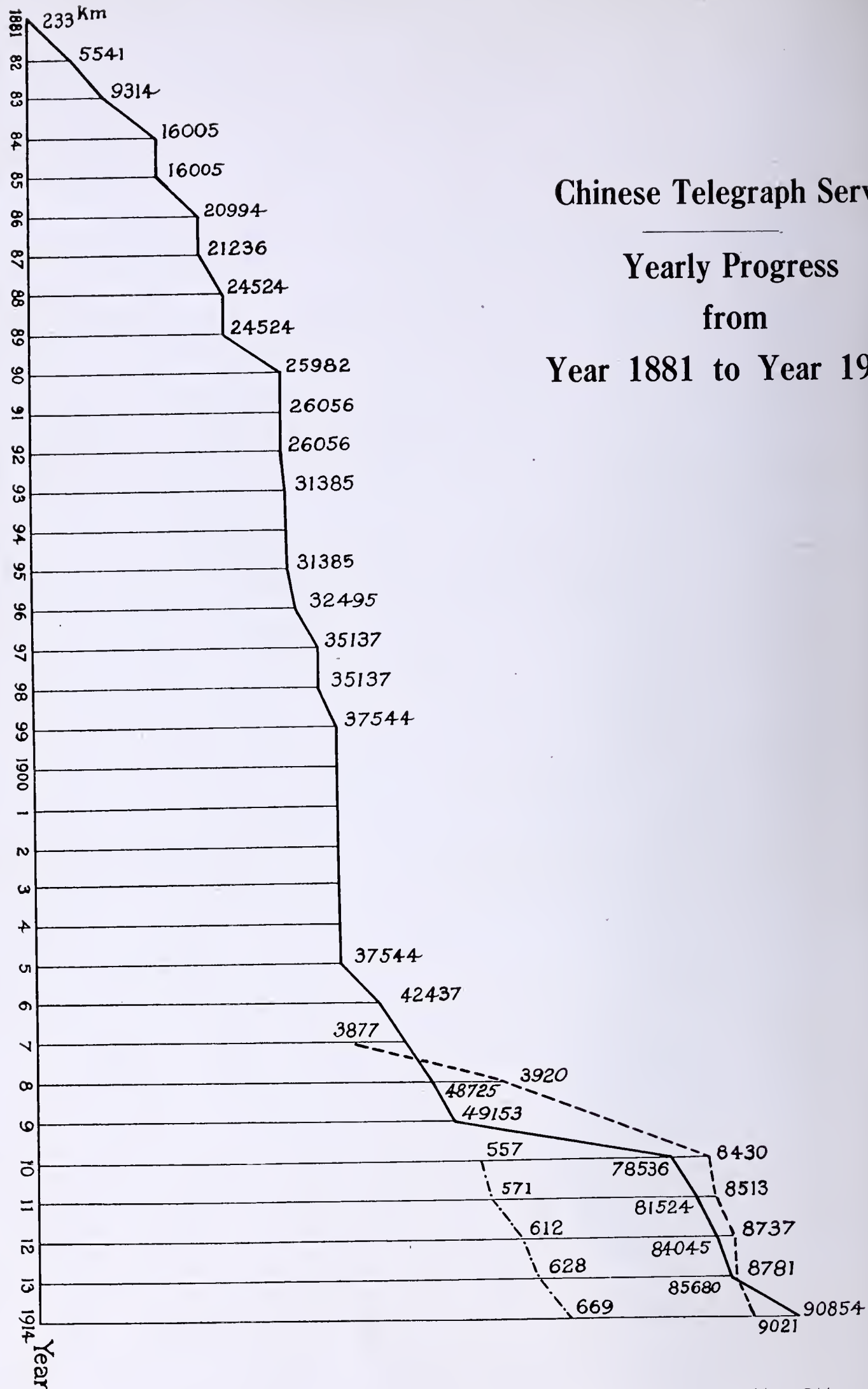


Chinese Telegraph Service

Yearly Progress

from

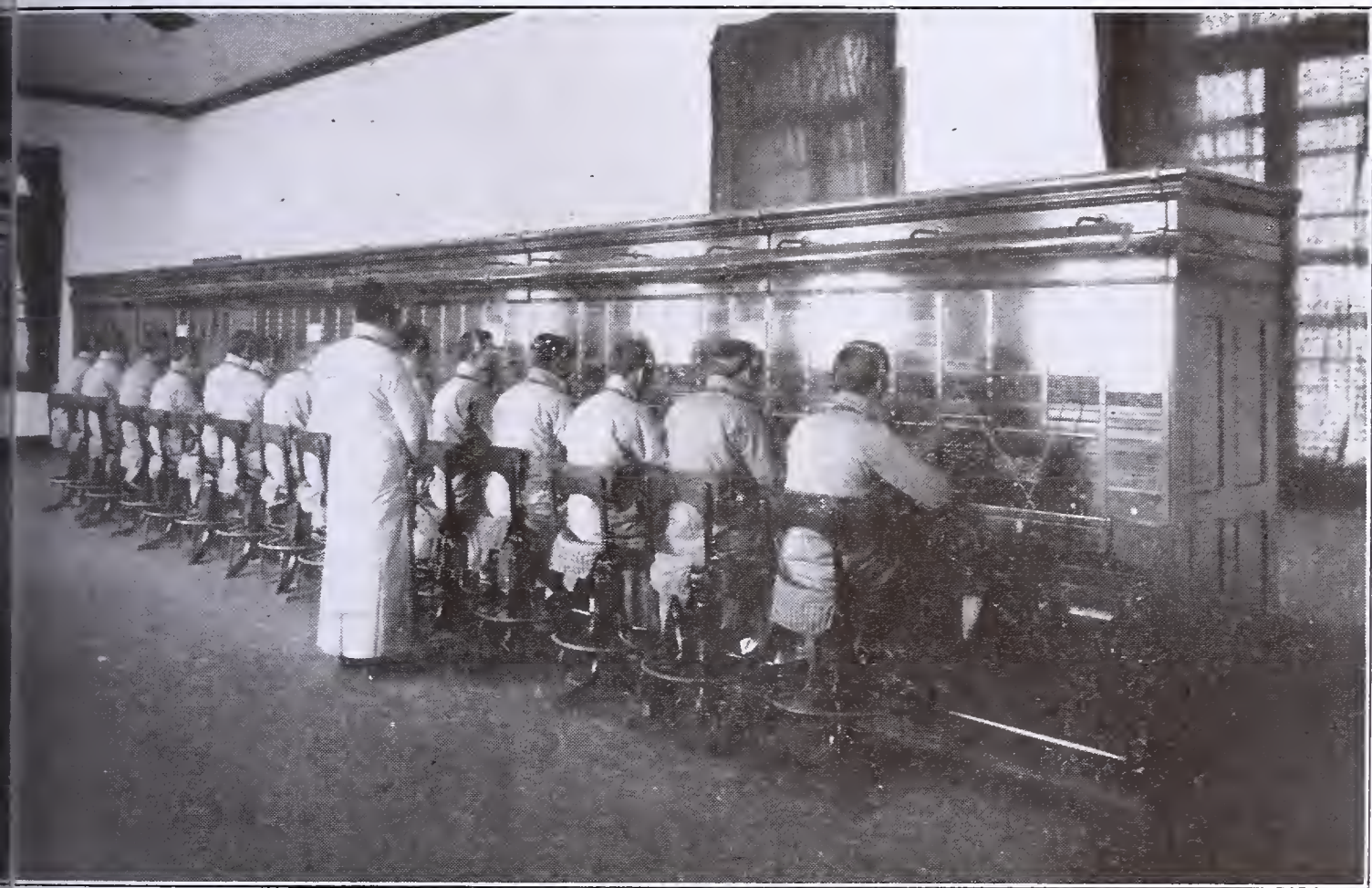
Year 1881 to Year 1914



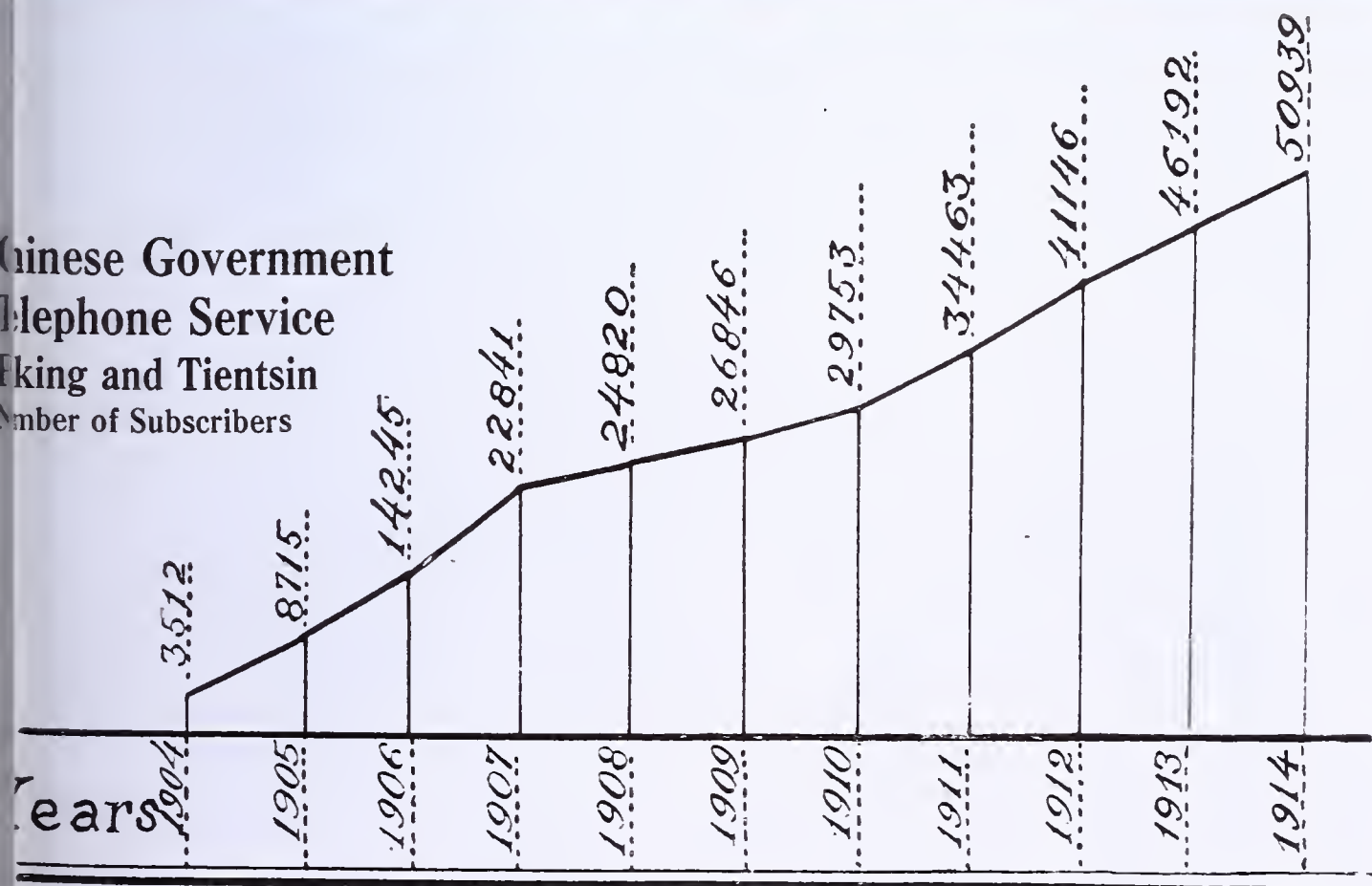
Modern Transportation in China

THE TELEPHONE SYSTEM

was not introduced into China until 1904. However, since then, its convenience has been greatly appreciated by the people, especially by the younger generation. The following chart shows the number of subscribers from the year 1904 to 1914 at the Government Telephone offices in Peking and Tientsin:



Chinese Government
Telephone Service
Peking and Tientsin
Number of Subscribers



The Shipping Facilities in China

中國航務

China has been favored by providence with an extensive sea-shore; besides, the great inland rivers are also navigable. The Chinese people have established already, thousands of years ago, a great inland waterway, the Grand Canal, which connects Tientsin (the northern port) with Hangchow, the great central inland port, after crossing the Yangtze River at Chinkiang. But the type of shipping that prevailed in the past was too small altogether to furnish the means of intensive trading between China and the other countries.

Most all the shipping of Chinese goods abroad is done by foreign vessels; yet they employ Chinese seamen. In China, there is much to do towards the developing of modern shipping.



Among the existing steamship companies, The China Merchants' Steamship Company is the largest one working with Chinese capital. It operates under the supervision of the Ministry of Communications of Peking and is the possessor of a fleet of thirty-five (35) ships aggregating eighty-five thousand (85,000) tons. Its headquarters are in Shanghai, while its docks and warehouses are spread all over the country in Newchwang, Tientsin, Chefoo, Ningpo, Wenchow, Amoy, Foochow, Swatow, Canton, Hong-Kong, Chungkiang, Nanking, Wuhu, Kieu-king, I-chang, Chungking, and some other cities. The capitalization of this company is estimated to be around forty million dollars (Chinese currency).

There are other shipping companies, not so extensive in their capacities.

Modern Transportation in China

The Ningpo Steamship Company, operating between Ningpo and Shanghai.

The Szechwan Steam Navigation Company, operating between I-chang and Chungking, while another company operates between Hankow and I-chang.

The two companies, **Shiu On** and **Yuen On**, operating between Hong-Kong and Canton.

There are, in addition to these organizations, a large number of steam launches, motor boats, sailing ships, native boats and other vessels, doing service in the inland waterways.

Between China and the other countries a very large export and import trade is carried on by the following steamship companies:

(1) **The Peninsular and Oriental Steam-Navigation Company**—(P. & O.)—British flag.—London to China and Japan.—Bi-monthly, with intermediate service, bi-monthly also.

(2) **The Canadian Pacific Railway Company (C. P. R.)—Steamship Line**.—British flag.—Vancouver to Hongkong, monthly, with one intermediate steamer.

(3) **The Pacific Mail Steamship Company (P. M. S.)**—American flag.—San Francisco to Japan and China, bi-monthly.

(4) **The Nord-Deutscher Lloyd (N. D. L.)**—German flag.—Bremen to China and Japan, bi-monthly.

(5) **The Messageries Maritimes (M. M.)**—French flag.—Marseilles to China and Japan, bi-monthly.

(6) **The Nippon Yusen Kaisha (N. Y. K.)**—Japanese flag.—Japan to China, Europe, America and Australia.

(7) **The Toyo Kisen Kaisha (T. K. K.)**—Japanese flag.—San Francisco to Japan and China, bi-monthly.

Besides these regular steamer lines there are other occasional sailing steamers, of all sizes and descriptions.

The following table will show the number of vessels entered and cleared at Chinese ports during the year 1914, and their tonnage:

Flags—	No. Vessels.	Tonnage.
British	32,705	38,795,409
Chinese	150,727	24,931,226
Japanese	22,143	23,694,774
German	3,597	3,328,597
Russian	3,989	1,875,613
American	3,116	1,017,492
French	516	882,440
Norwegian	670	746,005
Dutch	276	398,271
Portuguese ..	1,748	311,696
Austrian	51	174,233
Danish	100	139,526
Swedish	15	40,985
Total	219,649	96,326,267

Modern Transportation in China

The following is a list of the existing docks, shipbuilding and engineering works in China:

At Shanghai—

The Kiangnan Dock and Engineering Works.
The New Engineering and Shipbuilding Works, Ltd.
The Shanghai Dock and Engineering Company, Ltd.
The Vulcan Iron Works, Ltd.

At Hongkong—

The Hongkong and Whampoa Dock Company, Ltd.
The Taikoo Dockyard and Engineering Company, Ltd.
The W. S. Bailey & Co.
The Macdonald & Co.
The Ulderup & Schluter Co.

At Hanyang—

The Yangtze Engineering Works.

PRESENT OPPORTUNITIES IN CHINA.

China has a population of about 400,000,000 people, or one-fourth of the population of the world. Her territory occupies four million square miles or as much as the United States, including Alaska, the Hawaiian Islands, the Philippine Islands and the rest of her territories.

Her agricultural products are plentiful and varied. Her vast natural resources present large opportunities for development in the coming years and bid fair to place China on a very prominent position in the markets of the world. Her mineral resources are boundless and practically untouched. Her possessions of coal, iron, antimony, copper, silver, gold, tin, etc., often exceed that of any one country in the world. However, not before China will have developed, on the modern standard, her ways and means of communication, will she be able to present her goods to the world. This is the reason inspiring the present Chinese policies and causing the Government of China to bring to the forefront its reforms of transportation.

It is quite evident that the United States plants may be called upon to furnish a large amount of the equipment required for transportation in China; provided, the American product should correspond to the standards requested by the Chinese Government.

Thus, China might become, through her industrial and commercial possibilities, one of the largest factors of peaceful prosperity in the world.

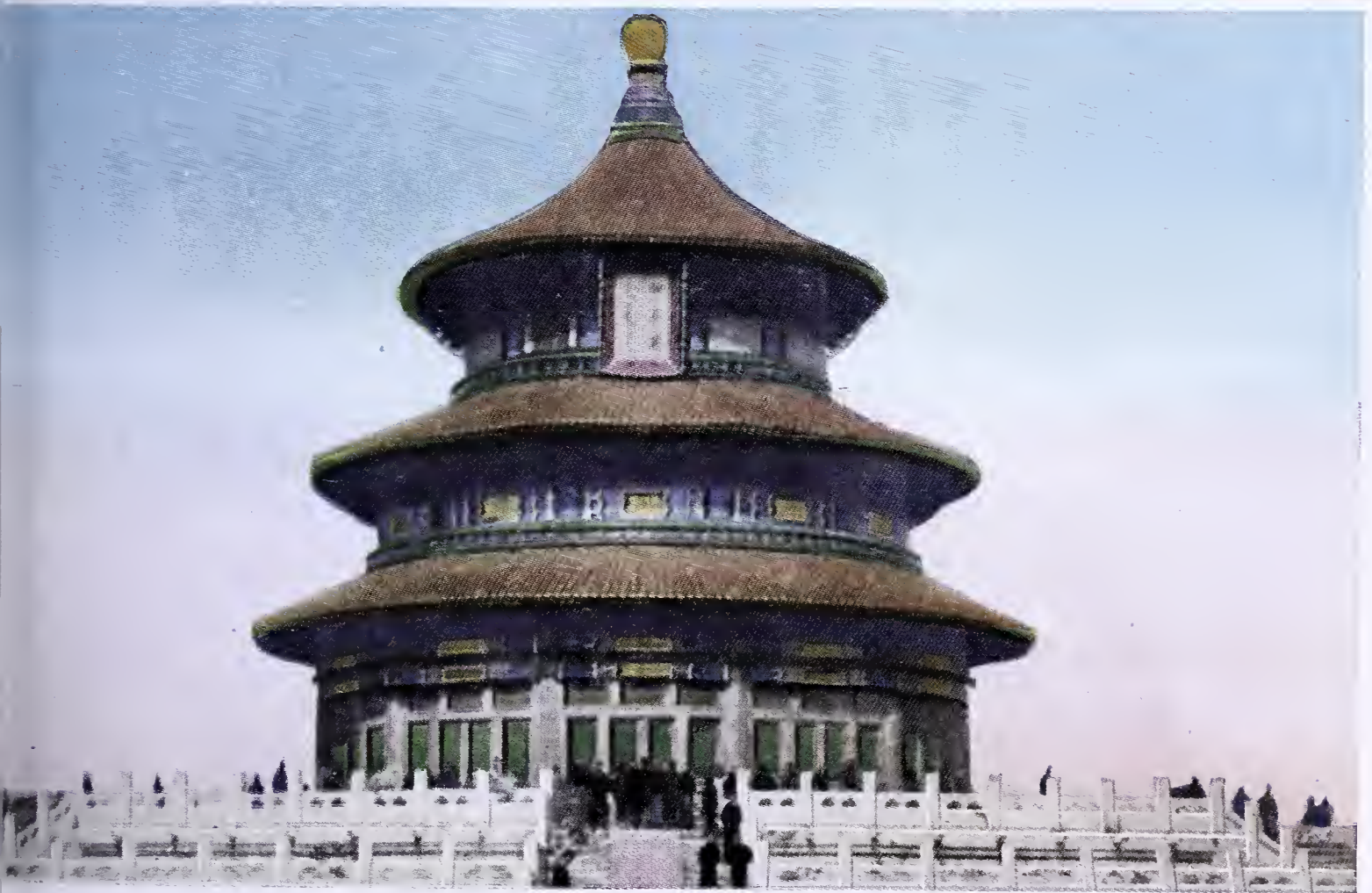
General Information for the Tourist

遊 華 指 南

Many people are yet, as regards to China, under some sort of doubts or ignorance as to its possibilities for enjoyment and picturesque traveling. I deem it my duty at this time to give the public a few pointers that would encourage them towards making a start for a tour of China. As our space here is limited, our information will be resumed to its minimum, but those travelers who will go and get first-hand information, will be more than pleased and fully rewarded for their efforts, through a wealth of souvenirs and information as to the possibilities of Modern China.

The living as well as the traveling **expenses in China** are a **good deal cheaper** than either in the United States or in Europe; yet the traveler may get the **same comfort** and enjoy the **same safety** as in his own home country. The Chinese people, as a whole, extend a hearty **welcome** to their foreign visitors.

Most parts of China are blessed with a temperate climate; naturally the far south is semi-tropical. But in the interior, at Hankow for instance, the summer is warmer and the winter colder than in the eastern or southern shores where the rainfall is more abundant. In Mukden, Peking and Tientsin the climate is rather dry compared to either Shanghai or Nanking, but cooler in sum-



"Tian-T'an," the Ceremonial Temple of Heaven, Peking

北京天壇

Modern Transportation in China

mer. There are no **special diseases** in any of these cities and one need not be afraid of getting sick, provided he takes the usual care of himself.

In case one would like to form a complete opinion about China he should spend at least from four to six weeks there, the traveling expenses being as follows:

To go to China from San Francisco by first-class steamer, requiring about 21 days:

American Currency.

To Shanghai, **first-class**, one way \$225.00

Return ticket to Shanghai and back 327.00

To Peking via Kobe, Japan, one way 249.60.

From San Francisco to Shanghai, **second-class** 85.00

From San Francisco to Peking 110.00

Within China the average daily expenses for traveling, including every necessity, will amount to five American dollars per day, or about \$210 American dollars for six weeks' stay.

For those coming to China from Europe the railroad fare from London, Paris or Berlin is about \$250.00 American money in the first-class Pullman cars and \$180.00 in the second-class cars, including sleeping accommodations. The time required for the Trans-Siberian travel is about twelve days.

All the main lines of the Chinese Government Railways are now equipped with the desirable modern appliances, both for the safety and for the comfort of the passengers. **Dining and mailing cars** are attached to every Express Train. **Up-to-date sleeping cars** are attached to all long-distance trains. There are also **Reserved or Parlor Cars** which may be obtained by applying directly to the station masters of the different railways.

Passenger groups numbering over twenty people may obtain a reduced railway rate upon application.

Since 1913 all the railroad employees in China have been provided with **uniforms** of the same design throughout the country by order of the Minister of Communications. They are easily recognized with their green uniforms in winter time and the dark blue or white in the summer time, also through their caps and cuffs, which are marked according to their rank. The public will find them **always ready to give information and service** within their power.

For luggage, the **through-check system** has been adopted for the convenience of the passengers, so that they do not need to look after their baggage from the start to the end of their trip. Any person **able to talk English** may travel about China without any difficulty on account of the great number of Chinese people who understand this language.

Modern Transportation in China

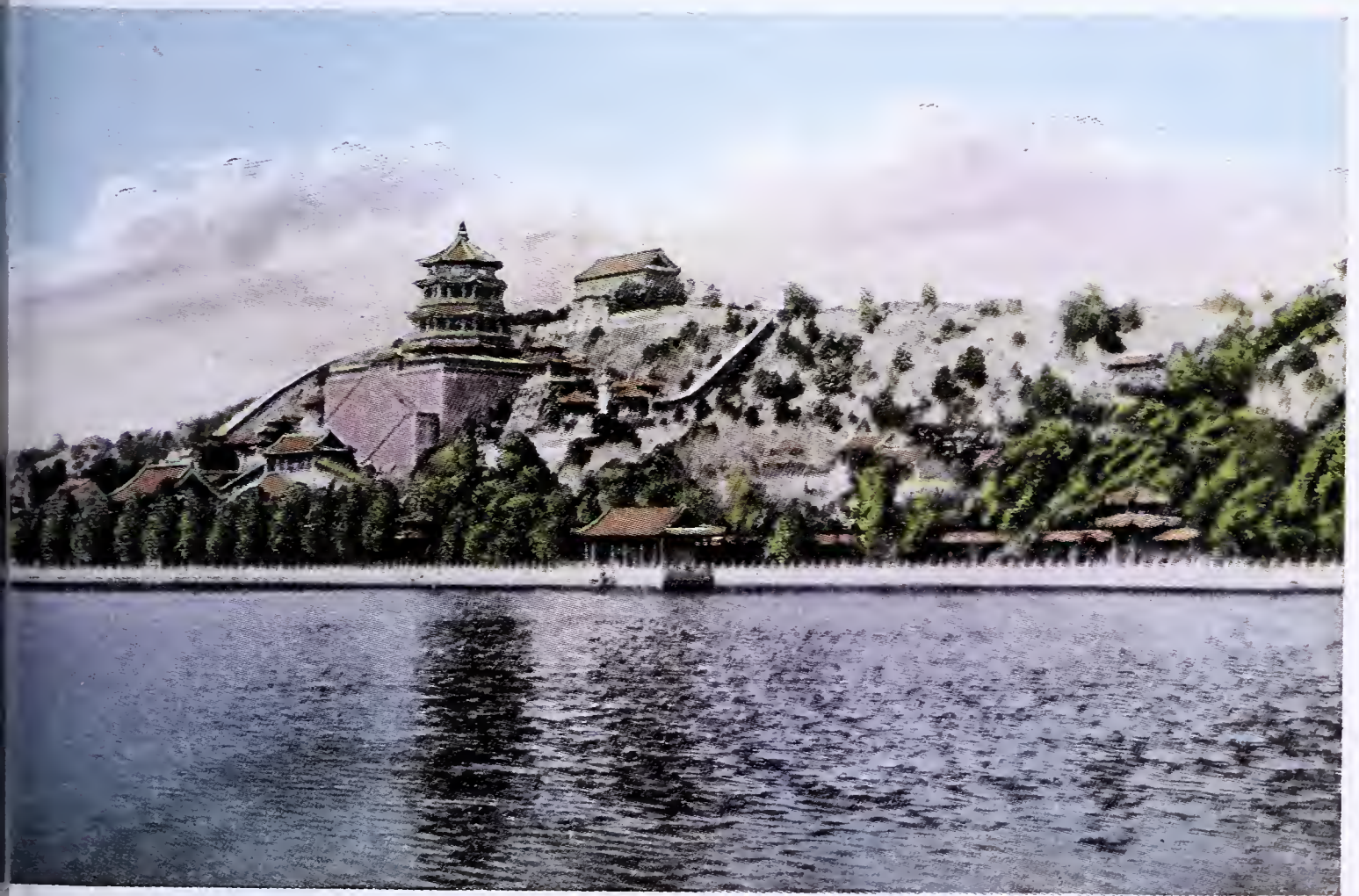
The Chinese Government Railroad, which connects with the Trans-Siberian Railway, is the **Peking-Mukden Line**. It starts from Mukden and leads via Shan-Hai-Kwan, Tang-Shan, Tientsin to Peking, being about 840 kilometers, not including the branch lines. It connects at Tientsin with the Tientsin-Pukow Line, which runs southward, and at Peking with the Peking-Hankow Line, which also runs southward, and with the Peking-Kalgan Line, running northwestward to Ta-Tung.

The **Tientsin-Pukow Line** starts from Tientsin via Tsinaifu to Pukow, being about 1,000 kilometers long. It connects at Tsinaifu with the Shangtung Railway, which runs eastward to Tsingtau, and with the Shanghai-Nanking Line, by crossing the Yangtze River in ferry boats.

The **Shanghai-Nanking Line** is about 300 kilometers long, running southeastward and is again connected to the Shanghai-Hankow-Ningpu Line.

The **Peking-Hankow Line** is 1,200 kilometers long, starting from Peking via Paotingfu, Chengtingfu, Chengchow to Hankow. It connects with several other lines. From Mukden to Hankow altogether there are 2,050 kilometers.

With these railroad facilities one could, therefore, travel to China directly from any big city in Europe. Thus one may buy a direct ticket for Hankow from either Paris or Berlin. On his way he could stop at Mukden, Tientsin, Peking, etc. First-class modern steamer could take him again from Hankow to Shanghai.



View of Summer Palace

頤和園全景

Modern Transportation in China

within two days (Hankow to Shanghai being about 900 kilometers). This is the first way of getting into the very heart of China from Europe through modern transportation.

There is a second way also. After arriving at Tientsin, transfer from Tientsin-Pukow Line to Nanking and then to Shanghai. From Mukden to Shanghai there are altogether about 2,030 kilometers. Purchase tickets directly to Shanghai or Tientsin.

The following is a partial list of the main cities of China and their special attractions:

MUKDEN is the old capital of China and the home of the last reigning dynasty. It is one of the most important cities in Manchuria, being the terminal point of the Peking-Mukden Railway Line, and at the same time one of the largest stations on the main line of the South Manchurian Railway. Regular daily trains run to and from Mukden and besides, once a week, the through mail train and the Train De Luxe go to Peking and return. The Train De Luxe, as well as all the express trains, contain sleeping and dining cars. In Mukden, one finds all the modern conveniences for travelers, also the consulates of the United States of America, of Great Britain, of France, Japan and Germany.

A number of public buildings, educational institutions, churches, shopping centers, would attract the attention and the interest of the visitor. We will quote here a few of the principal sights:

The Palaces of the Manchu Dynasty—Built over 300 years ago and containing a large collection of former Imperial treasures. The visitors can obtain permission for visiting these palaces through their respective Consuls.

The Imperial Pei-ling Tombs—Situated about five miles from the city, on a beautifully wooded knoll.

The Mukden Western Pagoda—Close to the railway station represents a pure type of Manchurian design, and, finally,

The Commercial Museum, which contains many collections of various industries and products, together with quite a few ingenious specimens of local handicraft.

SHAN-HAI-KWAN, where the mountains meet the sea, is the gate between China itself and her three Eastern provinces of Manchuria. This city is four miles away from the shore of the Gulf of Pe-Chili, where the famous Great Wall of China enters the sea. Close to that point on the shore there is a very fine bathing beach protected from either tides or currents, which makes it an ideal sanatorium for the residents of North China.—On the west of the railway line the Great Wall can be seen winding its way across the open fields, and rising with steady purpose to the northwest of the city, until it gradually reaches an elevation of a thousand feet; from there on, striding along ridges, over shoulders, and across almost

Modern Transportation in China

inaccessible gullies and ravines, it gradually disappears among the mountains.—Its large square watch towers regularly spaced apart stand out as wonderful monuments of the Chinese civilization in very early days.

Among the mountains, situated at the top of a spur 1,500 feet high, stands an interesting Taoist Temple. It takes five to six hours for the mountain-chair carriers, to raise one to that viewpoint. The birds-eye view obtained from the plateau just above the Temple is a magnificent one.

About twenty miles down the coast from Shan-Hai-Kwan one finds the summer resort of **Pei-tai-ho**. The railway station of that name—on the Peking-Mukden Line—is about five miles from the residential quarter by the sea. The beach stretches away for many miles and bathing is enjoyed there during six months, from May to October. The country round about, with its quaint-looking residences, each possessing a neatly kept garden, is distinctly pleasing.

TANG-SHAN and **KAIPING** have the most productive coal mines at present operated in China. The Tang-Shan railway shops and Engineering College are located a short distance away from the railway station. The shops are the largest of their kind in China. The Tang-Shan Engineering College has been in existence for many years and is now being supported and controlled by the Ministry of Communications. The scenery in the vicinity of the city is very prosperous.



Pa-da-ling Tunnel and the Ancient Great Wall, Peking-Kalgan Railway

京張路八達嶺山洞及萬里長城

Modern Transportation in China

TIENTSIN is the key city to Peking and the great Treaty-Port of China, being in many ways a leading city for China. It owns good roads and street railways, electric lights and water works. It has also its own municipal government. This city provides every possible means for comfort and convenience. It is the great export center for the products of North China and Mongolia.

Besides its numerous public buildings, libraries, schools and colleges, the principal sights of Tientsin are:

The Memorial Temple of Li-Hung Chang.

The Drum Tower.

The Pei-Yang University.

The Gordon Hall.

The Industrial School and Institute.

The Commercial Museum and Public Garden.

The Victoria Park.

The Race Course Track.

and many other important institutions.

PEKING is considered the most important city of the Republic of China, being the headquarters of the Central Government. It has for a good many years been a great educational, political and military center. It owns great monuments, wide streets, and every means of transportation and communication. All the Foreign Powers have their Legations in Peking. The principal sights of Peking are:

The Palaces of the Ching Dynasty in the center of the city among the most artistical and beautiful in the world.

The Temple of Heaven or "Tien-Tan," first in beauty and importance.

The Altar of Agriculture or Hsien-Nung-Tan, opposite the Temple of Heaven.

The Old Astronomical Observatory (whose azimuth, one of the principal instruments, was presented by Louis XIV, king of France.)

The Old Examination Hall where, in former days, the young generation assembled periodically to undergo the test that entitled them to the privilege of official appointments.

The Hall of Classics, exemplifying the elaborate Chinese ancient architecture.

The Drum and Bell Towers.

The Hao-Men, or the northern entrance to the Imperial City

The Coal Hill with its five pavilions.

The Three Lakes, with their White Marble Bridge and the White Marble Pagoda.

The Four Cities: The Tartar City, the Imperial City, the Forbidden City and the South City.

The Temple of Confucius, the great Chinese philosopher and moral leader.

Modern Transportation in China

The Lama Temple, containing about 3,000 Lamas or Mongol priests (Buddhist religion).

The Yellow Temple: Situated due north of the city; it is another Lama Temple of the seventeenth century.

The Altar of Earth, second in importance to the Altar of Heaven.

The Temple of the Five Pagodas or Wu-Ta-Si, a remarkable edifice with a distinct beauty.

The Government University of Peking with its many departments, representing the highest educational institution in China.

The Lieu-Li-Chang, or the great curio district.

The Ta-Seh-Lan or the busiest part of the Chinese district outside of the Tartar City.

The Botanical and Zoological Garden outside of the city on the west side. During the Ching Dynasty it was known as the Afternoon Resort.

Besides, there are various other interesting places that visitors could be pleased to see while in Peking. Near the West side of Peking there is the Summer Palace or Wan-Shau-Shan, most luxurious residence of the former Emperors of the Ching Dynasty.

Two hours to the north of the city by train on the Peking-Hankow Railway there is one of the strangest and most conspicuous places in the history of China—the Nankow Pass—while about



Shanghai Station, Shanghai-Nanking Railway

滬寧路上海車站

Modern Transportation in China

eleven miles from the Nankow Railway Station are located the "Ming-Tombs," among a beautiful scenery. The visitor will undoubtedly find Peking one of the largest and most interesting cities of the world.

KALGON is the trading town at the gate of Mongolia. Through the **Peking-Kalgon Line** of the Government Railways, it is helping to improve the commercial and other relations of Mongolia with central China.

All along the route of the **Peking-Hankow Line** there are many ancient ruins, most of which are of great interest and worth while the study of the western travelers as well as of the eastern people.

HANKOW is the most prosperous city along the Yangtze River. It is the center of business, shipping and manufacturing of China and also the greatest "black tea" port in the world. Although it is about 1,100 kilometers away from the sea, large ocean steamers can penetrate into Hankow most of the year. Thanks to this, Hankow, an inland city, has direct communications with foreign countries and besides this has a large number of industrial establishments.

HAN YANG, just west of Hankow, across the Han River, has very large iron and steel works and a Central Arsenal. Many of the Government railroad lines are using the Han-Yang rails, while thousands of tons of pig iron are exported from there to foreign countries every year.

WUCHANG is the capital of the Hupeh Province, where the army revolution broke out in 1911. This city is located on the south bank of the Yangtze River just opposite Hankow and Han Yang. It has many worthy historical remains, schools and industrial mills. The three cities of Hankow, Han-Yong and Wuchang form the real center of industry and commerce of China at the junction of the Han River with the Yangtze River.

KIUKIANG is the treaty port of the Kiangsi Province. In the mountains near Kiukiang is the summer resort of Kuling.

ANKING is the capital of the province of Anhwei on the Yangtze River and is an important coaling station for river steamers.

WUHU is the great rice port of China. Many large steamers come here to get their cargo of rice. The commerce here is improving and developing every day.

NANKING is the city of great area, with long walls and high hills. In early times it was the capital of the country. It is the most important strategical place, connecting the South and the North of China, as well as the East and the West. It is at the same time a great educational center. In and around Nanking are to be found many historical monuments.

On the river bank outside the city walls is Hsiakwan, where the steamer landings and the railway station are located. And just across the river is **Pukow**, terminal of the Tientsin-Pukow Line.

Modern Transportation in China

Along the **Tientsin-Pukow Line** there are also many historical points of interest and many beautiful views. We will mention here only a few among them:

TSINAFU, the capital of the Shangtung Province, is a great city located near the junction of the Grand Canal and the Yellow River or Hwang-Ho. The Yellow River and the Yangtze River are the two main rivers in China, but while the latter is a wealth producer, the former is a destroyer of prosperity; yet, it is on its banks that the early Chinese civilization was founded. The people in and around Tsinanfu are strong, brave and honest, but the country is not rich. Tsinanfu is also the terminus of the Shangtung Railway running to Tsingtau, being therefore one of the important centers of China. Half of the city of Tsinanfu is occupied by a lake covered with water-lilies, while on the other side of the city are situated many hills and mountains. The scenery as a whole is of great natural beauty.

TAANFU is situated at the foot of "Ta-Shan," one of the five famous sacrificial mountains of China. This mountain is not very high, yet the most picturesque of all. Confucius, the greatest Chinese philosopher, once said: "When you climb up to the top of Ta-Shan, you do realize that the world is small." None of the Western visitors should pass without seeing Ta-Shan, around which are many ruins of early Chinese civilization.



Autumn Moonlight on the Peaceful Lake,
Hangchow

杭州西湖……平湖秋月

KUFOW is the native city of Confucius. It has many tombs and temples of ancient sages, also many sights and ruins of the school and the library where the great sage Confucius taught his students. There are many trees there dating thousands of years back.

The Shanghai-Nanking Line traverses the wealthiest part of the Kiangsu Province, which is crossed also by the Yangtze River from East to West and by the Great Canal from North to South. The people in this part of the country are elegant and clever. Natural products are in abundance and the transportation means very convenient. This railroad line connects the following cities: Nanking, Chingkiang, Changchow, Wush, Soochow and Shanghai.

CHINGKIANG is located at the junction of the Grand Canal and the southern shore of the Yangtze River. It is a famous historical city surrounded by beautiful scenery.

CHANGCHOW and **WUSH** are rice marketing cities. They are both very rich. In their vicinity are beautiful excursion places and a fragrant mineral well, named "The First Well of China" by one of the former emperors of the Ching Dynasty. Excursions take place in handsomely decorated native boats.

SOOCHOW is a rich city located in the most fertile part of Kiangsu. It has long been famous for the eminence of its scholars and the beauty of its women. Being situated on the Grand Canal, it has an organized trade by water transports to the North, East, South and West.

HANGCHOW, the capital and treaty-port of the Chekiang Province, is located on the Shanghai-Hangchow-Ningpo Railway between the beautiful "West Lake" and the estuary of the Tsien Tang River. Near Hangchow one may see some of the finest scenery and most famous temples of China. The Chinese proverb says, "Heaven is above; below are Soochow and Hanchow." This proverb illustrates well the beauty of China. Four hundred years ago a Western traveler named Marco Polo declared that Hangchow was the most brilliant among the Chinese cities. Today Hangchow is a political, commercial and educational center. It is well provided with modern hotels and restaurants for the convenience of Western travelers. No visitor to China should miss the opportunity of seeing Hangchow. By rail, four hours from Hangchow one arrives to Shanghai.

SHANGHAI is at the gate of the Yangtze Valley on the Whangpo River. It is the greatest commercial city in China and one of the largest harbors in the world. Great steamers come in from Europe, America, Japan and India, to receive the products brought into the city by the inland river and coastwise steamers. Its tra

Modern Transportation in China

ing companies import and store enormous quantities of dry goods, machinery, railway material, sugar, and other foreign goods and export silk, tea, cotton, and many other native Chinese products to the outside world. The city is a great industrial center for the silk and cotton factories, tobacco and flour mills, ship-building works, etc. Its banks control a large part of the country's wealth and subscribe large amounts for the Government loans. Besides its commerce, Shanghai is a great literary city. It is the home of a great many learned men, both of the old school and of the new, containing the leaders of many provinces and many countries. From Shanghai are issued the leading newspapers of China that are spread all over the country. Shanghai has a very well organized police force and a very fine fire department. South of Shanghai the Kiangnan Arsenal manufactures arms and ammunition; also builds and repairs ships.

By rail it takes four hours from Shanghai to Hangchow via the Shanghai-Hangchow-Ningpo Line.

From Shanghai one may purchase steamer tickets direct for America or Europe. Going to Europe he may stop at Ningpo, Soochow, Amoy, Swatow, Canton, Hongkong and Singapore, and visit each of these interesting cities, the expenses for doing so being very moderate.

NINGPO (Chekiang Province, South China), is one of the great ports from which steamers run daily to Shanghai. It exports considerable raw cotton, and furniture.



The Interior View of the West Lake, Hangchow

杭州西湖……裏湖全景

Modern Transportation in China

FOOCHOW (Fukian Province), is located a few miles above the mouth of the Min River. It is the capital and treaty port of the Fukian Province. Steamers lay anchor at the Pagoda Island, on the river, a few miles below Foochow.

AMOY is a treaty port, with a fine harbor, which formerly had a great trade in tea with Formosa and Hongkong, and other cities. A railroad has been built by the people to run inland from Amoy, which will be connected, in the future, with the Ning-Siang Line of Government Railways.

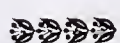
SWATOW has a large coasting trade and is now becoming one of the most important commercial ports of Kwantung. Its chief export is sugar. It has now a short railroad running inward to Chaochowfu.

CANTON is the capital of Kwantung Province, and the great shipping center of South China. It was the first city to establish direct trading with Europe. Eighty to ninety per cent of the Chinese citizens now in the United States, and in other countries are people from Kwantung. The city of Canton was built at a point where several rivers meet, so its inland communication with other provinces are also convenient and its trade is progressing. Canton can be reached directly from Hongkong by the Canton Kowloon Railway.

From Canton the traveler may take the train of the Canton Samshui Railway to **Fatshan**, a famous town, very near Canton with many industrial factories. From Samshui, about ten miles by steamer, along the Sikiang River, is

SHIUKING, one of the big cities of the Kwantung Province. There are famous mountains, temples, historical ruins, waterfalls and many natural and beautiful sceneries in or near this city. From Hongkong one may also take the steamer for "Kongmoon" to see many views along the **Sunning Railway**. This railway was built with the capital of the Chinese merchants of the United States, and it is a prosperous line.

Within a short time from date the Canton-Hankow Line, part of which was built by the enterprising merchants of Canton, will soon be completed, connecting with the Peking-Hankow Line, and thus establishing the through line from Peking to Canton. This will surely be a very popular route going from north to south—and vice-versa.



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MAP OF CHINA
圖全通交國民華中

- LEGEND : 圖例
- HIGHWAYS 公路
 - STATE BOUNDARY-LINE 國界
 - PROVINCE BOUNDARY-LINE 省界
 - GREAT WALL 長城
 - RIVERS 河流
 - RAILWAYS IN OPERATION 現成鐵路
 - RAILWAYS UNDER CONSTRUCTION 起工鐵路
 - RAILWAYS PROJECTED 擬定線
 - STEAMSHIP LINES 航路
 - CABLE LINES (TELEGRAPHIC) 海底電線

10000000
KILOMS 1000 500 300 200 100 50 25 10 5
MILES 1000 500 300 200 100 50 25 10 5

COMPILED FROM THE ORIGINAL MAP OF
THE CHINESE NATIONAL RAILWAY ASSOCIATION
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